

Exhibit 1

Redacted Pursuant to D.I. 1887

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

CRYSTALLEX INTERNATIONAL CORP.,)	
)	
Plaintiff,)	
)	
v.)	Case No. 1:17-mc-00151-LPS
)	
BOLIVARIAN REPUBLIC OF VENEZUELA,)	
)	PUBLIC - Redacted Pursuant
Defendant.)	to D.I. 1887
)	
_____)	

FIFTH SUPPLEMENTAL DECLARATION OF RANDALL J. WEISENBURGER

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I, Randall J. Weisenburger, pursuant to Section 1746 of Title 28 of the United States Code, declare as follows:

1. I submitted declarations in the above-captioned matter on August 25, 2021 (D.I. 354-1), September 10, 2021 (D.I. 355-1), December 17, 2021 (D.I. 423-1), April 11, 2022 (D.I. 457-1), and May 23, 2023 (D.I. 561-1), in support of the Venezuela Parties'¹ objections to the Special Master's (then) proposed sale process and recommendation to initiate the sale procedures. I incorporate herein the statements made in those declarations, and my previous opinions remain unchanged. I continue to believe that the process designed by the Special Master was not reasonably designed to maximize the value of the PDVH shares and, as I predicted, has resulted in a sale that does not reflect anything close to the fair market value of the shares. Had he chosen one of the alternatives I previously suggested, it is my opinion that the Special Master would have obtained significantly more value for the PDVH shares.

2. I have been further engaged by CITGO and PDVH to consider the Special Master's Final Recommendation and the sale process that preceded that recommendation. D.I. 1837. The Special Master has recommended that the Court approve Dalinar Energy Corporation ("Dalinar"), a wholly owned subsidiary of Gold Reserve Ltd., f/k/a Gold Reserve Inc., as the successful bidder to acquire the PDVH shares (the "Dalinar Bid"). I have reviewed materials produced in relation to the sale process and in this litigation. *See* Exhibit 2. Unfortunately, and as predicted in my previous declarations, the sale process designed by the Special Master failed to maximize value and resulted in a bid for the PDVH shares by Gold Reserve that is shockingly low in comparison to the valuations for the shares conducted by the Special Master's investment advisor and CITGO and PDVH's valuation expert, even for a forced sale.

¹ Capitalized terms used but not defined herein have the meaning ascribed to them in D.I. 481 and as used in my first declaration (D.I. 354-1).

3. I understand that CITGO and PDVH's valuation expert, Dr. Jose Alberro of FTI Consulting, a highly respected financial advisory firm, has determined that the fair market value of the PDVH shares is \$18.6 billion. Expert Report of Jose Alberro, PhD (dated July 7, 2025) ¶ 161. I also understand that, in 2023, the Special Master's investment bank advisor, Evercore Inc. ("Evercore"), prepared its own preliminary valuation of the PDVH shares which ascribed a range of valuations to the shares with a midpoint discounted cash flow ("DCF") value of \$13.2 billion. *See Exhibit 3.* I understand that, despite the results of these expert valuations, the Special Master and others have argued that whatever price the Special Master recommended as the winning bid would reflect the fair market value of the shares because it is the result of what the Special Master describes as a fair, open, and extensively marketed sale process. D.I. 1522 at 3–4; D.I. 1527 at 2–3. I further understand that the Special Master believes that the sale process achieved a price that reflects the fair market value of the PDVH shares because he claims to have occupied the position of a "willing seller" while marketing and selling the shares. D.I. 1522 at 3; 1527 at 2–3. However, based on my professional experience, the sale process, as designed and implemented by the Special Master, was not the functional equivalent of a competitive and open-market sale for an asset like the PDVH shares, as it was subject to multiple constraints that would not apply to an open-market sale process. Moreover, in my experience, no willing seller would have attempted to sell its property in such a fundamentally flawed way or committed the kinds of strategic and tactical errors made by the Special Master. No willing seller would have allowed a process to continue after receiving bids in the stalking horse round that were billions of dollars short of fair market value without considering available alternatives. And no willing seller would have accepted a bid so far below the fair market value of the PDVH shares.

4. First, based on my decades of experience in corporate finance,² I believe that the Special Master did not design the sale process in a way that was likely to generate fair market value. In a competitive and open-market sale process, a rational seller would have considered different options to sell or monetize the PDVH shares—including not only various auction structures for a creditor sale, but many others, including an initial public offering (“IPO”), a private placement, or a leveraged recapitalization—and would have ultimately chosen the option that would yield the greatest amount of competition and highest value under the circumstances. The Special Master, however, did not do this. Specifically, and in contrast to how a competitive, open-market sale process would be designed, the Special Master:

- a. Did not seriously consider or utilize alternative processes like an IPO or private placement for the shares, which would have been better at maximizing the value of PDVH far beyond the minimal value generated in this sale process;
- b. Insisted on marketing and selling the PDVH shares under constraints similar to those used in bankruptcy sales for distressed assets (but without the benefits of a bankruptcy sale, such as a discharge), even though CITGO is a thriving business;
- c. Failed to take steps necessary to attract serious strategic bidders; and
- d. Favored or was constrained to favor credit bidders who, because they could rely on their attached judgment as the basis for their bid, had an advantage over any non-credit bidders that may have been interested in participating.

5. Second, and notwithstanding the fundamental design flaws that constrained the ability of the sale process to maximize value, the Special Master also failed to implement the sale as a rational seller would. Indeed, in my opinion, the Special Master committed numerous strategic

² See Exhibit 1 (describing my experience with mergers and acquisitions, private investments, and service on boards of publicly traded companies).

and tactical errors as he conducted his flawed process, further undermining the likelihood that it would maximize value. Each of these errors compounded upon and magnified the effects of the others. For example:

- a. The Special Master publicly and repeatedly insisted that excessive value would have to be diverted away from the Attached Judgment Creditors to satisfy the claims of the PDVSA 2020 Bondholders (“2020 Bondholders”) in *Petróleos de Venezuela S.A. v. MUFG Union Bank N.A.*, No. 19-cv-10023 (S.D.N.Y.) (the “2020 Bondholder Litigation”), even as the 2020 Bondholders sustained defeats in their litigation in New York that rendered settling with them at or near the alleged value of their claims commercially unreasonable;
- b. The Special Master insisted on selling the PDVH shares before the resolution of the 2020 Bondholder Litigation (or even simply to await the outcome of the currently pending, fully briefed summary judgment motions on remand), even after it became clear that his undue emphasis on and public comments about the 2020 Bondholders’ claims were distorting participation, bidder incentives, and the willingness of the 2020 Bondholders to enter into a reasonable settlement;
- c. The Special Master insisted on selling the PDVH shares before the resolution of claims brought by certain creditors of the Republic and/or PDVSA who alleged that PDVH is the alter ego of PDVSA (the “PDVH Alter Ego Claimants” or the “PDVH Alter Ego Litigation”), even after it became clear that the uncertainty surrounding these claims was affecting bidder participation and despite the fact that a key opinion holding that those claims were meritless was issued on the same day that the Special Master entered into an SPA with Gold Reserve for the Dalinar Bid;

- d. The Special Master insisted on selling the PDVH shares without seeking improved regulatory certainty for the bidders, leaving strategic bidders with little incentive to participate;
 - e. The Special Master undermined the sale process by recommending Red Tree Investments, LLC (“Red Tree”) as the stalking horse bidder. The Special Master’s stalking horse recommendation set an unreasonably low floor for bidding during the Topping Period and improperly diverted bidder competition away from the Attached Judgment Creditors and to the 2020 Bondholders. That failure resulted in a proposed winning bid that stands as only a marginal improvement from that bidder’s own failed stalking horse bid;
 - f. The Special Master repeatedly incorrectly capitulated to threats and demands made by the bidders and certain senior Attached Judgment Creditors at each stage of the process—including granting exclusive negotiation rights or status to numerous bidders—which weakened the Special Master’s negotiating position in both the first round of bidding in 2024 and the new round of bidding that began in 2025; and
 - g. The Special Master’s engagement with Evercore and the contingency fee structure that he negotiated on its behalf did not create the proper incentive structure for an advisor in this sale process.
6. In my decades of experience, I have never seen a process marred with so many fundamental flaws and decisions made contrary to the industry standards for significant corporate transactions. I have never witnessed a willing seller decide to sell a company for a discount of the magnitude presented by the Dalinar Bid. And I have never seen a willing seller view the sale of a company for billions of dollars below its own investment bank’s valuation as a success. The

Dalinar Bid is so far from commercially justifiable that, in my opinion, no willing seller would ever accept the offer.

7. Finally, I believe that if the errors that the Special Master made were corrected, and certain additional steps taken, the sale process could—if rerun—result in significantly greater value to the creditors. A substantially greater value could be achieved even if—contrary to my recommendation—one of the alternative processes suggested above were not selected, and the Court-approved process were run again but without the Special Master’s timing-related and other strategic and tactical errors.

I. THE SPECIAL MASTER’S SALE PROCESS COULD NEVER YIELD FAIR MARKET VALUE FOR THE PDVH SHARES.

8. The Special Master has represented to the Court that whatever price is generated as a result of the sale process necessarily reflects the fair market value of the PDVH shares. D.I. 1522 at 3–4; D.I. 1527 at 2–3. In my opinion, however, this conclusion is inherently flawed because the sale process that the Special Master designed and implemented was highly unlikely to result in a bid that approaches the fair market value of the shares. The Special Master failed—from the outset—to design a process that would be suited for selling a complex commercial asset like the PDVH shares, instead pursuing a bankruptcy-adjacent process with a single-minded focus. Such sales, however, are not the way to attract serious and competitive bidders or to maximize the value of the PDVH shares. The Special Master also made numerous significant mistakes in implementing the process that further prevented the process from attracting serious and competitive bidders and maximizing value. And, as the outcome of this sale process demonstrates, neither result occurred here.

A. The Special Master Failed to Design a Sale Process that Would Attract Bidders and Maximize Value for the PDVH Shares.

9. There are many ways to design a sale for a complex commercial asset like the PDVH shares that would have maximized their value. Any willing seller would have seriously considered and evaluated a variety of different options. A willing seller would have, likewise, and before embarking on a specific design, approached likely bidders and asked what kind of issues they needed clarity on before they would take a serious look at the asset being sold (*e.g.*, would bidders only be interested in participating if there was a resolution of contingent liabilities or a reduction in regulatory uncertainty?). The willing seller would then, with that information in mind, ultimately design a sale process that had the greatest chance of attracting serious buyers and thereby maximizing the value of the asset.

10. In my previous declarations, I recommended that the Special Master design a sale process for the PDVH shares that would be “consistent with the development and implementation of a large-scale corporate financial transaction.” D.I. 354-1 ¶ 5(a); *see also* D.I. 423-1 ¶ 10; D.I. 457-1 ¶ 8. To design such a process, I explained that the Special Master should “solicit[] a broad range of alternative proposals for creative solutions from a number of financial firms, evaluate[] those proposals, and ultimately retain[] the firm with the best, most value-maximizing proposal to execute the proposed transaction.” D.I. 354-1 ¶ 5(a). I further provided the Special Master with a list of potential sale design alternatives, including a traditional IPO, an IPO via a Special-Purpose Acquisition Company (“SPAC”), a private placement transaction, or even a joint venture with a strategic partner. D.I. 354-1 ¶ 12. In other words, I recommended that the Special Master solicit proposals for and then design a sale process that could have functioned as the equivalent of a typical competitive open-market sale for the PDVH shares. Such a process, as I

explained then and continue to believe now, would be consistent with the standards for monetizing a complex commercial asset like the PDVH shares.

11. The Special Master, however, did not follow this recommendation. Instead, he insisted on pursuing a sale better suited to selling condemned property than a successful business. This decision is fundamentally at odds with standard practice for marketing and selling an asset like the PDVH shares. *See* D.I. 354-1 ¶ 7 (explaining that designing a sale process “akin to a bankruptcy liquidation sale . . . should have been [the] last resort” for the Special Master and his advisors); D.I. 457-1 ¶ 8 (“Fundamentally, a bankruptcy-like process is not appropriate for a sale of some or even all of the shares of a functioning, non-distressed company like PDVH—full stop.”). [REDACTED]

[REDACTED] the Special Master and his advisors do not appear to have seriously considered—and did not adopt—any of these alternatives. In my opinion, this decision had a detrimental effect on both the value of the PDVH shares and the bidders’ participation in the sale process. Had the Special Master seriously evaluated these alternatives, he could have been able to administer a sale process that was more in line with industry standards for monetizing a solvent corporation and maximized the value of the PDVH shares. Moreover, any one of these alternatives likely would have, in my opinion, yielded more value for the PDVH shares than the Dalinar Bid.

12. There is good reason to believe that an alternative to the Special Master’s process would have yielded a higher value for the PDVH shares. The market for shares in public refining companies is strong. Industry commentators have observed that demand for petroleum products in the U.S. is stable to growing, and they expect that trend will continue through the 2030s. *See* Exhibit 6 at 9–10. At the same time, however, industry commentators note that there have been

significant capacity closures and further suggest that there will be few, if any, capacity expansions in the near term (*i.e.*, there will be fewer investments in new refineries and their related infrastructure). *Id.* This scenario (*i.e.*, stable to increased demand and static to declining capacity) will likely create a tighter market for refining, which, in turn, would result in higher crack spreads (*i.e.*, higher profit margins) at existing refining facilities. This creates a strong market for the shares of the existing refiners.

13. In my opinion, rather than sell the PDVH shares for a bargain-basement price in the current sale process, the Special Master could have attracted a larger, more serious, and strategic pool of potential investors by designing a different sale process, such as by facilitating an IPO. For instance, an IPO could also be used to establish the value of PDVH (or its shares), and then resulting proceeds could be distributed to senior creditors while the shares could be distributed to lower order creditors in rank order as the shares are monetized.

14. Moreover, simply preparing for an IPO could have had a net positive effect on the quantity and quality of the bids—even if the Special Master did not ever launch the IPO. Had the Special Master, for example, prepared for an IPO of the PDVH shares in parallel with the sale process and then advised bidders that if their bids were inadequate, he would default to an IPO instead, he could have (1) effectively set a price floor for the bids tied to the market price of the shares, resulting in higher bids from the outset, and (2) ensured that if his preferred process failed to maximize value (as it has), he would have a viable alternative to pursue that was more in line with industry practice for how to monetize a solvent corporation. I understand that the Special Master had the power to significantly alter the design of the sale process, given that the Sale Procedures Order (“SPO”) allows him to make material modifications to its procedures. *See* D.I. 481 ¶ 10.

15. Another option that at least would have been available to a seller in an open-market sale would have been to explore a leveraged recapitalization, under which more senior creditors would be paid in cash and more junior creditors would be paid with securities in a trust funded by a portion of the company's cash flow over a defined period of time. Such recapitalization and trust arrangements are a common way to offset the debts owed by large corporations and have many advantages. For example, such a structure can result in satisfying more creditors than an auction, without disrupting the company's operations. And, as with an IPO, the possibility that a seller on the open market could pivot to a leveraged recapitalization if bids from bidders are too low generates additional competitive tension and helps to increase value. Moreover, should any such design require creditor consent, the Special Master could have worked to secure that consent, as I understand he required the bidders to do in this sale process. *See* D.I. 1583 at 1–2.

16. As I have testified previously, rather than pursue a sale process that suited the complex and unique nature of the asset itself and that would have best maximized value, the Special Master designed this sale to mimic certain characteristics of a bankruptcy or distressed asset sale. *See* D.I. 354-1 ¶ 7; D.I. 457-1 ¶ 8. Whether he chose to do so intentionally or not, the point that the Special Master operated under greater constraints than a seller on the open market remains the same. Moreover, a bankruptcy or distressed asset sale typically only attracts the kind of bidders who make it their business to acquire “distressed” assets for a bargain-basement price and on an accelerated timeline. Bidders in that line of work are often financial buyers, and even then, a specific subset of financial buyers who seek out transactions with a high-risk/high-reward ratio.

17. Bankruptcy sales are also designed and run in such a way as to maximize the value of a failing business before it fails. Typically, that means that a bankruptcy proceeding has to move

fast because of the factors that drove the failing company to bankruptcy in the first place (*i.e.*, it was failing) and the constraints imposed on the company during the bankruptcy (*e.g.*, certain limitations on using or selling the company's assets, restrictions on access to lines of credit, and inability or difficulty in developing strategic plans). Therefore, the debtor company would want to wrap up the proceeding and carry on the business as soon as possible. In those cases, a bankruptcy court is unlikely to stop the process to consider and weigh the material risks existing outside of the bankruptcy proceeding that could impact the value of the company (and in a bankruptcy, unlike here, those material litigation risks will ultimately be extinguished). Indeed, the longer a bankruptcy proceeding takes, the more the debtor company suffers. In this case, however, the Special Master's insistence on continuing the sale process before the material risks that he identified and that I catalogue in Sections I.B.1 and I.B.2 of my declaration were resolved depressed bidder participation. And, ultimately, the problem with trying to sell the PDVH shares in the sale process that the Special Master designed is that CITGO is a thriving business and—apart from the fact that it is being sold in a forced judicial sale—cannot be considered a typical distressed asset. Instead, CITGO would, under the appropriate sale conditions (including where the risks associated with acquiring the asset were appropriately mitigated or resolved prior to sale) likely be sold to a bidder for a price far closer to its actual fair market value—not the value generated for a distressed asset under the constraints the Special Master imposed.

18. Relatedly, I understand that credit bidding is permitted under Delaware law, but in my opinion, this sale process favored credit bidders like Gold Reserve and Red Tree over strategic bidders, to the detriment of robust bidding. Under the terms of the SPO, I understand that an Attached Judgment Creditor may bid for the PDVH shares, in part, by using its attached judgment as the equivalent of cash. D.I. 481 ¶¶ 26–28. Non-credit bidders did not have the same advantage

in this process. Non-credit bidders would likely be required to put up their own equity to complete their financing, and this equity would, in turn, be worth far more than the value of the creditors' attached judgments because those judgments have little likelihood of having any value after this sale. In fact, unless the Attached Judgment Creditors can recover through the proceeds generated in this sale, their judgments are likely worth nothing because, as soon as the sale transaction closes, my understanding is that there will be no assets remaining in the United States to attach and satisfy their judgments. As a result, there is little downside in a credit bidder joining a consortium in the hopes of some payout, even through non-cash consideration. When the sale process was designed, there were hardly the \$21 billion in potential credit bidders that were in line by the time bidding began. Any strategic or other bidder would rationally see the magnitude of credit bidders in the process as a barrier to entry—or at least disincentive to entry—in the bidding, as any incrementally improved bid they put together over whatever bid preceded it could be outbid by another credit bidder jumping on board a consortium. The consequence of such a disincentive to participate is the absence of real competitive tension to drive up the price.

19. An indication of the failure of the Special Master's process is the fact that the winning bidder is providing no new capital to the sale. Instead, it is financed solely from loans secured by the assets of CITGO and credit bids of the consortium of Attached Judgment Creditors supporting the winning bidder. Those credit bids have no substantial value outside of this sale because there are no easily available assets from which they can be satisfied. That, combined with a sale price billions of dollars below fair market value, makes it clear that the Special Master's marketing of the PDVH stock failed to maximize value.

20. Therefore, the fact that the Special Master has argued that the sale process achieved the result of a typical open-market sale makes little sense given that the process he designed was

constrained in multiple ways. A process subject to such constraints, in my opinion, is not reasonably designed to generate a price that reflects fair market value.

B. The Special Master Failed to Implement a Sale Process that Would Attract Bidders and Maximize Value for the PDVH Shares.

21. Not only did the Special Master not design a sale process likely to yield a fair market value for the PDVH shares, but he also failed to implement the process that he designed as a rational seller would have, further decreasing the likelihood that the process would maximize value. This is, in my opinion, due to the numerous strategic and tactical errors that he made along the way. In a typical sale process, no willing seller would have told bidders that a sale could not occur unless the bidder first paid off a party with whom the seller was in active litigation, much less encouraged bidders to divert value to their litigation opponent. To compound that mistake, having unreasonably and unnecessarily elevated the importance of the 2020 Pledge, no willing seller would then choose to initiate the sale before the resolution or mitigation of the pending claims that then threatened to chill bidder participation. No willing seller would have pushed the sale process forward without attempting to secure any sort of regulatory certainty for strategic bidders. No willing seller would have capitulated to every threat or demand leveled at him by the bidders. No willing seller would have forged ahead with the sale process after the bids in the stalking horse round were billions of dollars short of the fair market value of their asset. No willing seller would have recommended a stalking horse bid that so grossly undervalued the asset being sold because such a decision would, no doubt, undermine the success of the sale process and all but guarantee that the asset would be sold for a grossly inadequate price following the topping period. Finally, no willing seller would have advocated for a contingency fee arrangement for his advisors that failed to create the correct incentive structure for their recommendation and expertise. The Special Master, by contrast, made each one of these strategic and tactical errors, and in so

doing, he failed to implement a process that could ever have resulted in a sale of the PDVH shares for anywhere close to their fair market value.

1. The Special Master Improperly Exaggerated the Risk Posed by the 2020 Bondholders then Drove the Sale Process Forward Without Waiting for the Material Developments in their Pending Litigation.

22. In my opinion, the Special Master placed an outsize and undue emphasis on the risk posed by the 2020 Bondholders' claims throughout the entirety of this sale process. I previously opined that the best way to maximize value was to not launch the sale process until litigation over the 2020 Bondholders' pending claims concluded or had resulted in more clarity, thereby reducing any uncertainty that might impact bidder participation. The Special Master, as I understand it, took the opposite tack. Rather than delay launching the sale process, his counsel made repeated and public statements that the 2020 Bondholders' claims would have to be resolved (*i.e.*, paid off) as part of *this* process, he explicitly encouraged bidders to earmark funds to compensate the 2020 Bondholders—as opposed to the Attached Judgment Creditors—and he attempted (though ultimately failed) to directly settle their claims, which made the 2020 Bondholders a central focus for the bidders and essentially required bidders to divert funds and attention to address an unquantified and unproven risk. Then, having made the risk of the 2020 Bondholders' claims a feature of his sale process, the Special Master insisted on driving the sale forward before that risk was mitigated and made the resolution of their claims a gatekeeping term in later rounds of bidding. These errors—both the elevation of the risk and the refusal to pause the sale for it to be resolved—chilled bidding and diminished the amount of sale proceeds that could have otherwise gone to the Attached Judgment Creditors. In my opinion, no willing seller would have committed these errors. I further believe that if the sale process was properly restructured and then re-run, as I discuss in Section III, and the risk posed by the 2020 Bondholders was weighed appropriately and/or the sale

were to take place after the resolution of the 2020 Bondholder litigation, bidder participation would increase and the Special Master would be more likely to maximize value for the PDVH shares.

a. The Undue Emphasis on the Risk Posed by the 2020 Bondholders Resulted in the Diversion of Sale Proceeds Away from the Attached Judgment Creditors.

23. In my Fourth Supplemental Declaration, I detailed the flaws that I identified in the sale process at the time resulting from the Special Master's mistreatment of the 2020's claim. D.I. 561-1 ¶ 25. As I explained then, "initiat[ing] the sale procedures before that litigation has concluded . . . would significantly discourage potential bidders from participating, or for any that do choose to bid, cause them to severely discount their bids to account for the bidder's assessment of the potential liability of th[ose] structurally senior claims." D.I. 561-1 ¶ 25. I therefore recommended that the sale process should not begin "until uncertainty surrounding" the 2020 Bondholders' claims had been resolved in the underlying litigation. D.I. 561-1 ¶ 26.

24. The Special Master, as I acknowledged at the time, was also aware of the perceived risk stemming from the 2020 Bondholders' pending litigation. D.I. 561-1 ¶ 25. Contrary to my recommendation, however, the Special Master suggested that, rather than wait for the resolution of the litigation, the claims would need to be resolved as part of the sale process and in any bids submitted to acquire the PDVH shares. *See, e.g.*, D.I. 348 ¶ 55. Worse, the Special Master also publicly announced that, as part of his efforts to resolve the 2020 Bondholders' claims, he intended to engage directly with the 2020 Bondholders because the Bondholders "expressed their intention to play a constructive role in the sale process." D.I. 472 at 2. Further, I understand that before the first-round bids for the PDVH shares were submitted in June 2024, the Special Master explicitly instructed bidders to either assume that the Special Master himself would secure a "release" of the CITGO Holding Pledge or that they should propose an alternative means by which they would

resolve the 2020 Bondholders' claims. D.I. 1144 at 2, 9–10. The Special Master further instructed credit bidders to ensure that the terms of their credit bid would “provide sufficient cash to satisfy in full any obligations secured by a senior lien on the shares of PDVH, including . . . the PDVSA 2020 Notes Claim.” *Id.* at 2. Finally, I understand that the Special Master spent months attempting to negotiate a release of the CITGO Holding Pledge with the 2020 Bondholders, even going so far as to make public statements that the 2020 Bondholders' claims would need to be “resolved” as part of the sale process, *see, e.g.*, Hrg. Tr. (May 17, 2024) at 19:5–20:4, but that those negotiations were ultimately unsuccessful, D.I. 1323.

25. In my opinion, the Special Master's bidding instructions and public statements regarding the need to resolve the Bondholders' claims grossly exaggerated the importance of those claims and had to place the issue at the forefront of bidders' minds. Rather than mitigating the uncertainty caused by these claims, the Special Master explicitly exacerbated it. And, as demonstrated by the series of bids submitted in this sale process, that strategic error has led to the improper diversion of funds away from the Attached Judgment Creditors.

26. I understand that, in January 2024, the Special Master received twelve non-binding indications of interest, and nine of those bidders were approved by the Special Master to proceed to the next round of bidding. D.I. 1838 ¶ 11. On June 11, 2024, the Special Master received six binding first-round bids. *Id.* ¶ 13. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] I understand that between June and September 2024, the Special Master continued to engage in negotiations with the bidders. D.I. 1837 ¶¶ 30–32.

27. I further understand that, following these many months of bidder negotiations, on September 27, 2024, the Special Master filed a notice of his preliminary recommendation of a successful bid and attached an “executed” SPA naming Amber Energy, Inc. (“Amber Energy”), a shell company and subsidiary of Elliott Investment Management (“Elliott”), as the winning bidder to acquire the PDVH shares for a purported price of \$7.286 billion (referred to herein as the “Elliott” bid). D.I. 1325 at 2; *see also* D.I. 1325-1. I understand that the Special Master’s preliminary recommendation faced swift and universal opposition from the Attached Judgment Creditors and the Sale Process Parties. *See, e.g.*, Hrg. Tr. (Oct. 1, 2024) at 29:19–21 (Crystallex counsel stating that “[w]e have, and we can tell now, that we have major significant objections to the proposed transaction as the first creditor in line”); *id.* at 42:12–13 (ConocoPhillips counsel stating that there are “tremendous issues raised by as much as we know about” the Elliott proposal); D.I. 1373-4 at 2 (Red Tree and Contrarian stating that Elliott’s “proposed bid would violate Delaware law” and “strip Additional Judgment Creditors of their attachments without satisfying their judgments with cash”); D.I. 1373-5 at 2 (consortium of Attached Judgment Creditors stating that the Elliott bid does not “satisf[y] th[e] objective” of the sale process and that the “bid is deficient in many key respects”). I understand that the backlash was based, in large part, on the fact that Elliott’s bid included a two-pronged escrow structure that would hold the proceeds otherwise payable to the Attached Judgment Creditors in a trust until the 2020 Bondholder Litigation (and the PDVH Alter Ego claims) were resolved to Elliott’s sole satisfaction. *See, e.g.*, Hrg. Tr. (Oct. 1, 2024) at 29:19–21 (Crystallex); *id.* at 42:12–13 (ConocoPhillips); D.I. 1373-4 at 2 (Red Tree and Contrarian); D.I. 1373-5 at 2 (consortium of Attached Judgment Creditors).

28. I understand that Elliott’s proposed escrow structure contained no guarantee that the Attached Judgment Creditors would ever be able to collect the sale proceeds owed to them.

See D.I. 1446-1 at 134–42. I further understand that Elliott’s bid was conditioned entirely on the Court granting a motion filed by the Special Master asking it to enjoin the PDVH Alter Ego Litigation. *See id.* § 7.1(f).

29. I understand that after the Attached Judgment Creditors and the Sale Process Parties denounced the Special Master’s preliminary recommendation, the Special Master submitted a revised alternative bid from Elliott on November 6, 2024. *See* D.I. 1414; D.I. 1414-1. I understand that Elliott’s revised bid removed the escrow structure for the sale proceeds that was dedicated to the PDVH Alter Ego Claims, but that it continued to escrow the funds dedicated to resolving the 2020 Bondholder Litigation. D.I. 1414 at 2; D.I. 1414-1 at 2. Elliott’s alternative transaction also included a \$2 billion reduction in the proposed purchase price and remained conditioned on the Court enjoining the PDVH Alter Ego Litigation. I understand that Elliott’s revised bid was also universally opposed by the Attached Judgment Creditors and the Sale Process Parties who suggested, for example, that the “risk” that Elliott was “attempt[ing] to insure against” was “remote.” D.I. 1417 at 1 (Statement of Attached Judgment Creditors Rusoro, Gold Reserve, and O.I. European Group). I understand that the Court later denied the Special Master’s motion to enjoin the PDVH Alter Ego Litigation which meant that both of Elliott’s bids were moot because they were conditioned on the Court granting the injunction. *See* D.I. 1493; D.I. 1515.

30. Even though Elliott’s bids were not successful, it is my opinion that the Special Master’s recommendation and the ultimate failure of Elliott’s bids in 2024 greatly impaired the sale process when it was restarted in 2025. By recommending Elliott’s bid and thereby endorsing its treatment of the 2020 Bondholder litigation as a serious risk any bidder would need to “insure” against, the Special Master made the resolution of the 2020 Bondholder Litigation a central issue

for bidders and, in essence, doubled down on his previous public statements that their claims would have to be resolved as part of the sale process.

31. Unlike a willing seller, the Special Master decided to continue with the sale after the failure of his preliminary recommendation, and this time, he made the resolution of the 2020 Bondholders' claims a gating issue for any bidder, meaning that bidders would be required to address those claims in conjunction with any bid that they submitted.

32. I understand that the Court ordered the parties to develop new procedures for another round of bidding to commence in January 2025. *See* D.I. 1517. As the parties briefed the procedures for this new round of bidding, I understand that the 2020 Bondholders—likely emboldened by both the Special Master's public statements about the need to resolve their claims as part of the sale process and Elliott's escrow arrangements—filed a series of pleadings with the Court, threatening to block any transaction where the bidder proposed to acquire the PDVH shares in a way that, in the 2020 Bondholders' view, interfered with their supposed rights to the CITGO Holding stock. *See, e.g.,* D.I. 1553; D.I. 1558; D.I. 1661; D.I. 1677; D.I. 1693; D.I. 1699.

33. I further understand that the Court issued a decision setting out the contours of the new round of bidding in January 2025 (D.I. 1554) (the "January Order"), which directed the Special Master to solicit and select a stalking horse bidder, or, if no bid was worthy of stalking horse protections, to designate a base bidder. Finally, I understand that the Court ordered that the Special Master should not consider stalking horse bids that "includ[ed] any requirement or condition with respect to the 2020 Bond Entities" other than an acknowledgement of their pending claims in New York. D.I. 1517 ¶ 28. Despite the Court's direction that the 2020 Bondholders should be given little deference in this new round of bidding, however, I understand that the Special Master ultimately recommended a stalking horse bidder—Red Tree—whose entire bid was

premised on resolving the 2020 Bondholders' claims, which diverted significant capital away from the Attached Judgment Creditors. D.I. 1596. Then, during the Topping Period, a time in which bidders should be competing to drive up the price of the stalking horse bid, the Special Master informed bidders that they must be able to "explain[] to the Special Master's satisfaction how [their bid] will be able to close the transaction in the event that the PDVSA 2020 Bondholders succeed in their litigation prior to that closing" and confirm that the bidder "bear[s] the risk of the PDVSA 2020 Bondholder litigation." D.I. 1679 at 2. If a bidder could not offer a satisfactory explanation, they could, in the alternative, "structure[] [their] bid in a way that the Special Master was satisfied did not implicate the PDVSA 2020 Bondholder litigation *at all*." *Id.* (emphasis in original); *see also id.* at 4 ("Bidders must propose transactions [with] a high degree of closing certainty, regardless of the outcome of the [2020 Notes] litigation."). Again, the Special Master's extraordinary emphasis on the 2020 Bondholder Litigation that he himself amplified to the level of a gating issue would make any rational bidder focus time and resources on seeking a resolution to that litigation, even if doing so was at the expense of seeking a higher bid price. I discuss the other failures of the Special Master's stalking horse recommendation and the topping period in Section I.B.4.

34. It is clear to me that the bidders' undue emphasis on the 2020 Bondholders during the sale process was a problem of the Special Master's own making. First, the Special Master encouraged the bidders to earmark funds for the 2020 Bondholders in their bids or to assume that he would secure a release of their claims. Before this invitation, however, the default expectation (and the most logical one) was that the bidders would be capable of valuing the PDVH shares, and any contingent liability attached to them, on their own—without the Special Master putting his thumb on the scale for the weight of any one liability.

35. Second, by endorsing Elliott’s proposal to escrow funds for the 2020 Bondholders in his September 27, 2024 Notice of Recommendation, the Special Master once again signaled to bidders—and to the 2020 Bondholders—that their claims should be resolved as part of the sale process, despite the fact that their validity was, as I understand it, still disputed and subject to active, but soon-to-be-resolved, litigation in New York. In my opinion, no willing seller would actively work to undermine the value of the asset that he is selling by encouraging or, at least, endorsing bidders to divert their funds and use them to resolve a contingent risk.

36. Third, the Special Master could have mitigated interference from the 2020 Bondholders by taking care not to signal to them that resolving their claims was a threshold issue to the success of closing any sale transaction. However, the Special Master made repeated, public statements that the 2020 Bondholders’ claims must “be resolved” and that he therefore anticipated paying off their claims as part of the process. *See, e.g.*, D.I. 1513 at 19:5–17. Moreover, the Special Master should not have *directly negotiated* with the 2020 Bondholders to try to reach a settlement, as such direct engagement by the judicial officer running the sale only bolstered the 2020 Bondholders’ outsized confidence that their purported rights to the CITGO Holding shares were relevant to this sale process (as evidenced by their repeated threats to block or otherwise undermine the sale process in their briefing submitted throughout December 2025 and January 2025). *See* D.I. 1144 at 6. If the 2020 Bondholders were of the view that a new owner of PDVH may well continue to litigate the validity of the bonds after the transaction closed, they would have had to come to terms with their dwindling likelihood of success and—potentially—have agreed to settle their claims (through direct negotiations with PDVSA or the bidders) for far under their alleged value.

37. Finally, and as discussed in greater detail in Section I.B.4, the Special Master should never have selected Red Tree as the Stalking Horse Bidder, and in no event should he have

then made the resolution of the 2020 Bondholders' claims a threshold issue for bidders to address in the Topping Bid. Such compounded errors diverted bidder attention and funds that should have otherwise gone to the Attached Judgment Creditors.

38. Notably, my opinions about the Special Master's failures with respect to the 2020 Bondholders would not change even if they ultimately prevail in their litigation. The strategic errors discussed herein (such as refusing to pause the sale process and negotiating directly with the 2020 Bondholders) have already led to depressed bids and emboldened the 2020 Bondholders to assume that they will be able to recover an outsized portion of their alleged claims as part of the sale process, regardless of how their underlying litigation is resolved.

b. The Special Master's Insistence on Continuing with the Sale Before the Resolution of the 2020 Bondholder Litigation Is at Odds with How a Typical Sale Would Be Implemented.

39. In my opinion, no willing seller would have chosen to make a contingent risk the focus of his sale process. Rather, a willing seller would have, as I initially recommended, likely held off on initiating a sale until that contingent risk was resolved so as to better encourage bidder participation and maximize the value of their bids. Indeed, if a typical sale process is to function effectively, it cannot be clouded by material and unresolved liabilities that threaten to diminish the value of the asset being sold. The presence of such material and unresolved liabilities in any sale will depress competitive tension because no serious buyer would be interested in acquiring an asset that they could later lose control of or that could be stripped of its value.

40. I understand, however, that the Special Master insisted on moving the sale process forward, even after it was clear that bidders were—at his encouragement—diverting funds to compensate the 2020 Bondholders at a grossly inflated rate. I further understand that, since the inception of this litigation, the Venezuela Parties have repeatedly emphasized to the Special Master

that, rather than make the resolution of the 2020 Bondholders' claims a feature of the sale process, the Special Master should simply wait to launch the sale until their claims were resolved. *See, e.g.*, D.I. 561 at 13–15 (the Venezuela Parties articulating the reasons why it would not be “prudent” to launch the sale process while the 2020 Bondholder Litigation was still pending); D.I. 1144 ¶ 16 (the Venezuela Parties explaining that framing the 2020 Bondholder Litigation as “something to be resolved[] at the expense of parties to the sale process . . . would erroneously convey to potential bidders the notion that the CITGO Holding Pledge is likely valid” which would, in turn, “discourage bidders and suggest that any bid should be deeply discounted to give great weight to the CITGO holding pledge despite its highly questionable validity”); D.I. 1144 ¶ 9 (recounting the history of the Venezuela Parties' efforts to warn the Special Master about the risks of proceeding in the face of the 2020 Bondholder Litigation, and the Special Master representing to the Court that it posed “no impediment to his efforts” (citing D.I. 643 at 11)); D.I. 1459 at 9 (the Venezuela Parties proposing a sale process schedule that would have “provide[d] sufficient time for Judge Failla to rule on the validity of the 2020 Bondholders' pledge under Venezuelan law”); D.I. 1511-1 (same). I made the same recommendation in my Fourth Supplemental Declaration. *See* D.I. 561-1 ¶ 25. The Venezuela Parties have further maintained that if the sale process is going to continue, bidders should be allowed to price in any perceived risk *on their own*, not with the Special Master instructing how and at what level they should value the 2020 Bondholders' purported claims. *See* D.I. 1144 at 9–10.

41. Despite the Venezuela Parties' repeated requests to hold off on launching the sale process until the 2020 Bondholder Litigation was resolved, I understand that the Special Master resisted those requests at every turn and drove the process forward after already improperly elevating (and exaggerating) the profile of the risk. *See, e.g.*, D.I. 348 ¶ 55 (opining that the risk

from the 2020 Bondholders “will likely need to be addressed prior to *or in conjunction with* any actionable bids being received”) (emphasis added); D.I. 472 at 2 (the Special Master stating that “he intends to commence discussions with the advisors to the PDVSA 2020 Bondholders, who have expressed their intention to play a constructive role in the sale process”); D.I. 583 ¶¶ 8–9 (asserting that the Court should “disregard[]” the Venezuela Parties’ arguments that the “[m]arketing [p]rocess should wait for resolution of” the 2020 Bondholder litigation); D.I. 1481 at 5 (objecting to the Venezuela Parties’ suggestion to create a schedule that would allow for the resolution of the 2020 Bondholder Litigation and stating that “[a]dding additional time to the schedule will needlessly delay resolution of the Sale Process”).

42. Finally, I understand that as the Special Master implemented the sale process, the 2020 Bondholders suffered a string of repeated losses in their litigation throughout 2024. *See Petróleos De Venezuela S.A. v. MUFG Union Bank, N.A.*, 106 F.4th 263 (2d Cir. 2024) (vacating district court decision because the New York Court of Appeals determined that the validity of the 2020 Bondholders’ notes “turns on substantive Venezuelan law”); *Petróleos de Venezuela S.A. v. MUFG Union Bank, N.A.*, 41 N.Y.3d 462, 473–74 (2024) (finding that the validity of the notes “is determined by the local law of the issuer’s jurisdiction” which “require[s] the application of Venezuela’s law”). I understand that these losses call into question the validity of the 2020 Bonds. I further understand, however, that although the 2020 Bondholders held a tenuous grip on success in their litigation, the Special Master refused to change course and pause the sale process to account for this material change.

43. As discussed in further detail in Section I.B.1, it is my opinion that, after having repeatedly insisted that the 2020 Litigation was a hurdle a successful bidder had to surmount, if the Special Master had paused the sale process to allow time for a resolution of the 2020

Bondholder Litigation, bidders would have participated after it was restarted without the uncertainty of the Bondholders' claims hanging over the process. This, I believe, would have generated more competition in the sale process and, consequently, a higher price for the PDVH shares. This also would have been consistent with how a sale process would typically be implemented (*i.e.*, after the mitigation of material contingent liabilities). The Special Master's single-minded effort to resolve the 2020 Bondholder Litigation in coordination with the sale process, however, is not consistent with the management of a sale process reasonably designed to maximize value. Indeed, it defies all logic to continue with a sale while what the Special Master characterized as material liabilities remain unresolved, particularly when those claims may in fact be worthless. In order to properly administer this sale process, the Special Master should have waited for the resolution of the 2020 Bondholder Litigation (or at least a decision on the now-pending motions)—especially after the 2020 Bondholders suffered those significant losses in 2024—and then re-opened the bidding process to bidders who would be free to participate in the process and submit bids that no longer accounted for that risk.

2. The Special Master Exaggerated the Risk Profile of the PDVH Alter Ego Litigation then Chose To Continue the Sale Process Instead of Awaiting Material Developments in the Litigation.

44. As with the 2020 Bondholder Litigation, in my opinion, the Special Master placed undue emphasis on the risk posed by the PDVH Alter Ego claims during the bidding process. After delaying for months to address the PDVH Alter Ego claims filed in New York and Texas in the summer of 2024, the Special Master petitioned the Court to enjoin those cases because he believed they posed a serious threat to the bidding process. The Court, as I understand it, declined to enjoin those cases. *See* D.I. 1493; D.I. 1515. But, despite his own prior statements about the materiality of the risks those cases posed, the Special Master insisted on driving the sale forward before the

risk he overemphasized was mitigated. Once again, the Special Master, in my opinion, committed fundamental errors by elevating the profile of a contingent risk and then refusing to pause the sale until it could be resolved. In my opinion, no willing seller would have committed these errors. I further believe that, given what I understand to be a material reduction in the risk profile of the PDVH Alter Ego Litigation occurred in May 2025, if the sale process were properly re-run, bidder participation would increase, and the Special Master would be more likely to maximize value for the PDVH shares.

45. I understand that, beginning in June 2024, a series of cases were filed by creditors of the Republic or PDVSA seeking to execute on the shares of CITGO Holding, premised on a theory that PDVH is the alter ego of PDVSA. I understand that, although many parties believed the chances that these creditors would be successful were remote, *see, e.g.*, D.I. 1277 at 3 (Crystallex describing the PDVH Alter Ego Litigation as “meritless”), the Special Master again unreasonably magnified the risk that those cases posed to the value of PDVH and sale process.

46. In September 2024—three months after the first case was filed—the Special Master filed a motion to enjoin the cases and stated that this litigation was not only interfering with his ability to negotiate with bidders, but also to ultimately recommend a successful bidder. D.I. 1248; D.I. 1249. I understand that the Court ultimately denied the Special Master’s motion to enjoin the PDVH Alter Ego Litigation in December 2024. D.I. 1493; D.I. 1515. Nevertheless, and despite his previous statements that the PDVH Alter Ego Litigation would chill bidding, the Special Master refused to pause the sale process and instead allowed the cloud of uncertainty he created to persist throughout the entire sale process.

47. In my opinion, the Special Master’s decision to elevate the risk profile of the PDVH Alter Ego Litigation, and then continue with the sale process in spite of that risk, was detrimental

to bidder participation in the process and ultimately (but unsurprisingly) led to bidders depressing their proposed purchase price for the PDVH shares. A direct example of these consequences is Elliott's proposal to hold the sale proceeds in an escrow for the resolution of the PDVH Alter Ego claims (as discussed in more detail in Sections I.B.1 and I.B.5). [REDACTED]

[REDACTED] the Special Master should have recognized how detrimental the PDVH Alter Ego cases had become. At that point, he should have moved for a stay of the sale process so that the litigation could be resolved without further damage to the value of the PDVH shares. The Special Master's failure to do so, however, not only doomed his recommendation of Elliott's bid, but it also created an artificial ceiling for the price of the PDVH shares in the second round of bidding that began in January 2025. Indeed, because the Special Master showed that (1) he was willing to accept bids that offered such extraordinary discounts to the purchase price based, in part, on the PDVH Alter Ego Litigation, and (2) that he was unwilling to pause the sale process so that the risk he overemphasized could be resolved, bidders had every incentive to submit bids with significant price reductions in the next round.

48. Again, as demonstrated by the results of the second round of bidding, this is not mere hypothesis. I understand that as the Topping Period was coming to a close in May 2025, one court in which the PDVH Alter Ego Litigation was pending issued a favorable order for PDVH, finding that the plaintiffs had failed to prove that PDVH was the alter ego of PDVSA, but indicating that an opinion explaining the decision would be forthcoming. *See G&A Strategic Investments I LLC, et al. v. Petróleos de Venezuela, S.A., et al.*, 1:23-cv-10766 (JSR), ECF No. 245 (Order) at 2–3 (S.D.N.Y. May 20, 2025) (the “Girard Street Alter Ego Litigation”). I understand that the Venezuela Parties then immediately petitioned the Special Master and the Court to extend

the Topping Period so that bidders could attempt to revise their bids to account for this significant development. *See* D.I. 1757. I understand that the Special Master initially resisted the Venezuela Parties' request, D.I. 1763 at 2, but later changed course after new groups of bidders expressed an interest in bidding following the *Girard Street* alter ego decision, D.I. 1770. I understand that the Court then granted an extension of the Topping Period for an additional 21 days to accommodate these potential new bidders, but the Special Master did nothing to again market the shares or advise potential bidders of the development. D.I. 1779. Finally, after the Topping Period concluded, I understand that the judge in the *Girard Street* Alter Ego Litigation issued his opinion, which definitively determined that the *Girard Street* alter ego plaintiffs' allegations had no merit and that they had "utterly failed" to prove their claims. *G&A Strategic Investments I LLC v. Petróleos de Venezuela, S.A.*, 23-CV-10766 (JSR), 2025 WL 1752342, at *16 (S.D.N.Y. June 25, 2025). I further understand that the opinion was issued on the very same day the Special Master signed an SPA with Gold Reserve for the Dalinar Bid. However, the Special Master rushed ahead rather than pause the sale to encourage bidders to compete against each other to raise their bids in light of the new information or to explore whether any bidders who had elected not to participate while the New York case was pending might reconsider their position.

49. In my view, if the Special Master believed the alter ego cases were as damaging to the sale process as he had advised the Court, he should have paused the sale process as soon as the first PDVH alter ego case was filed and it became clear to him that it would impact his negotiations with bidders. I understand, based on my review of the parties' briefing submitted in this proceeding, the consensus was that, even before the judge issued his decision in the *Girard Street* Alter Ego Litigation, the claims had little chance of success. I also understand that the court's breakneck schedule in the *Girard Street* Alter Ego Litigation meant that a decision on dispositive

motions would likely be issued in the first or second quarter of 2025. *See Girard Street Alter Ego Litigation*, Feb. 27, 2025 Minute Entry. Therefore, had the Special Master paused the sale process, even for a few months so that the court could enter its decision on the pending dispositive motions, this would likely have cleared the way for participation by more bidders. This conclusion ultimately bears out in the record because the Special Master later represented to the Court that after PDVH secured a victory in the *Girard Street Alter Ego Litigation*, “multiple groups of potential new bidders” expressed their interest in submitting a bid. *See* D.I. 1770 at 2. However, not surprisingly, with only 21 days to catch up to where the rest of the bidders were in conducting their diligence after a year and a half, none of these bids were able to come to fruition. Thus, while the brief extension of the Topping Period provided some additional time to adjust bids to account for the new reality, it could not and did not cure the problems caused by the Special Master’s decision to charge ahead in 2024 while the alter ego cases loomed.

50. To be clear, however, my recommendation that the Special Master should have paused the sale process would not change even if a court had issued a decision in these cases that was adverse to PDVH’s interests. Staying the sale process would have had value regardless of the outcome of the PDVH Alter Ego Litigation. For example, if the Special Master had paused the sale process while the PDVH Alter Ego Litigation unfolded, and PDVH ultimately prevailed, bidders likely would have returned to the auction process on the same footing after the pause, completed diligence on the same schedule, and then submitted bids with a proposed purchase price that adhered more closely to the fair market value of the PDVH shares, rather than pricing in steep discounts to accommodate the exaggerated risk of the litigation as amplified by the Special Master. And if PDVH ultimately lost these cases while the sale process was paused, then it is likely that, given the consequences of that decision, all of the Republic’s and PDVSA’s alleged judgment

creditors and claimants would pursue recovery out of PDVH's assets on an alter ego theory rather than out of the PDVH stock, requiring a new proceeding. Therefore, it would not matter *how* the PDVH Alter Ego Litigation was resolved, only that it *was resolved* one way or the other.

51. I understand that the Court stated that "it will be extremely difficult to persuade the Court that the bidder should be allowed to exit an executed (and Court-approved) SPA based in any significant part on whatever may occur in connection with Alter Ego Claims (pending or potential)," D.I. 1554 at 21, and suggested that a ruling against PDVH on those claims would not meet "the Delaware law standard" for a "Material Adverse Effect," *id.* at 9 n.7. Those suggestions, in my view, required bidders to bear the risk of those claims and likely contributed to the low bids submitted.

3. *The Special Master Failed to Mitigate Regulatory Uncertainty.*

52. In a typical sale process, a willing seller would also have ensured that any regulatory barriers to participation were addressed, or at least mitigated, before launching a sale process. In my experience, no strategic bidder (*i.e.*, another oil and gas refiner) would be willing to expend significant time and capital pursuing a deal that may or may not survive regulatory scrutiny. However, because the Special Master failed to mitigate regulatory uncertainty and antitrust risk in this process, strategic bidders were likely concerned about participating in the sale process because of the risk that antitrust regulators would block the transaction.

53. I understand that the Special Master and his team did not approach any government antitrust regulators to seek preclearance or some guidance that would assuage this legitimate concern among refining companies. That may have been a reasonable, albeit conservative, approach to the Federal Trade Commission's ("FTC") policies under the Biden Administration. However, after the sale process was re-set in December 2024, the Special Master was directed to

solicit bidders to participate in a new round of bidding, D.I. 1517 ¶ 1, and the Trump Administration was prepared to step in at the FTC. At that point, the Special Master should have taken every opportunity to bring these antitrust concerns to the new administration, assuming that the new administration would take a different and likely more favorable view of the acquisition of CITGO by a strategic bidder. Even a public signal of openness to a relaxed merger review would have helped encourage strategic buyers to bid. Unlike hedge funds, strategic buyers are not bargain hunters by nature that seek to collect assets at severe discounts to turn a profit on them a few years later. Instead, they are serious buyers that would seek to purchase an asset to run it as part of their own operations, looking to benefit from operational synergies as opposed to process discounts. Failing to understand the impediments to value-maximizing bids—and failing to take action to facilitate such bids—was an error.

4. *The Special Master Recommended an Unjustifiably Low Stalking Horse Bid, Which Depressed Competition in the Topping Period.*

54. In a typical stalking horse auction free from the constraints that plagued this sale, the bid selected as the stalking horse should be viewed as an acceptable winning bid in the event that a viable topping bid fails to emerge. It would also be structured in a way that allows competing bidders to understand how to top it during the topping period, meaning that its key terms would be transparent so that competing bidders have a blueprint for their own topping bids. Finally, and most critically, the stalking horse bid would set a high price floor so that bidders will compete to improve upon the price set by the stalking horse. In a stalking horse auction, it is reasonable for the seller to consider multiple factors in determining whether a bid is worthy of stalking horse protections, including both the price of the bid and the certainty that it will close. However, the critical factor at the stalking horse stage should be the price offered to acquire the asset. It is crucial that any stalking horse bid set a reasonable floor for any competing bids in order to generate

sufficient competitive tension during the topping period. This sale process bore none of the hallmarks of a normal stalking horse auction. Instead, the Special Master recommended a stalking horse whose bid price was half that of the highest bid received, overstated the value of contingent claims, and set an unreasonably low floor on the price of the PDVH shares that predictably capped competition on price in the Topping Period, diverted bidder attention and funds to resolve a contingent risk that the Court, as I understand it, strongly encouraged him to give little deference to, and ultimately resulted in a winning bidder that only marginally improved upon the terms of its own stalking horse bid. That result should be deemed an objective failure under any metric.

55. I understand that four bidders submitted stalking horse bids for the PDVH shares on March 7, 2025: Red Tree, Gold Reserve, [REDACTED], *see* D.I. 1837 ¶ 43, and I reviewed the bid packages and accompanying materials submitted by each bidder. I also understand, however, that the Special Master focused his efforts on what he considered to be the top two bids: Red Tree, which submitted a bid at \$3.699 billion, and Gold Reserve, which submitted a bid at \$7.081 billion. Strikingly, the bid submitted by [REDACTED] included a proposed purchase price for the PDVH shares of [REDACTED]

[REDACTED] And [REDACTED] submitted a stalking horse bid that was so low [REDACTED] [REDACTED] that the Special Master all but rejected it outright.

56. In my opinion, the Special Master's representation to the Court that his process would result in the "fair market value" of the PDVH shares—a position I understand this Court also to have expressed—likely incentivized bidders to submit lower bids, both at the stalking horse stage and during the Topping Period, confident that the Special Master would view their bids as a market indicator in any event. *See* D.I. 1554 at 4 ("[T]he Court anticipates that, while not

dispositive, ‘[t]he price that results from the Marketing Process will be the best evidence that exists of the fair market value of the PDVH Shares taking into account the benefits and risks associated with this unique asset,’ as the Special Master writes.” (quoting D.I. 1522 at 5)). Because bidders understood that the winning bid—no matter how low its actual value—would likely be deemed to reflect the fair market value of the PDVH shares, they had little reason to fear that their bids would be rejected by the Special Master or the Court for being too low. And any competitive pressure among bidders was unlikely to counteract the effect of this understanding, given the relatively small number of bidders involved and their shared incentive to massively discount their bids in light of these statements. That is especially true because the bidders during this round were aware of how low the bids were during the failed process that resulted in the Special Master’s proposal of Amber Energy as the winning bidder. Given all this, these statements by the Special Master and the Court about the result of the sale process reflecting the fair market value of the shares significantly contributed to the unacceptably low sale price proposed by the Special Master now.

57. Although, in my opinion, all of the bids drastically undervalued the PDVH shares, I understand that Gold Reserve submitted the highest bid in the stalking horse round, proposing to acquire the PDVH shares for \$7.081 billion. Exhibit 14 at 1. Based on my review of Gold Reserve’s stalking horse bid package, I understand that it proposed to finance its bid and compensate the Additional Judgment Creditors by requiring that its financing vehicle merge with CITGO and leverage CITGO’s balance sheet. D.I. 1666 at 2; Exhibit 14 at 5–7. Red Tree submitted the second highest bid. Red Tree’s proposed purchase price—\$3.699 billion—was significantly lower than Gold Reserve’s, but it also represented that, as part of its bid package, it had negotiated a settlement agreement with the 2020 Bondholders, worth approximately \$2.0 billion, as memorialized in an accompanying Transaction Support Agreement (“TSA”). D.I. 1596 ¶¶ 24–25.

58. The Special Master, as I understand it, then [REDACTED] [REDACTED] and continued negotiating with Red Tree and Gold Reserve between March 7 and March 21, 2025. *See, e.g.*, Exhibit 15; Exhibit 16; Exhibit 17. After his initial review of the bids was complete, [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] I also understand that the Special Master believed that Gold Reserve's bid was not worthy of stalking horse protections because he had some reservations about Gold Reserve's ability to close a transaction, given that the proposed financing structure of its bid could have, in the Special Master's view, drawn a litigation challenge from the 2020 Bondholders. *See* Exhibit 19.

59. As an initial matter, in my opinion, the Special Master should not have viewed either of these bids as worthy of stalking horse protections. Each was billions of dollars below its own investment bank's valuation of the PDVH shares and was plagued by risks that the Special Master himself had elevated, namely, the 2020 Bondholder Litigation. In my experience, however, recommending Gold Reserve as the base bidder, even though its bid was far from an acceptable price, would have been far more rational than what transpired. Gold Reserve's bid offered the highest price for the PDVH shares, which would have set a floor to generate competitive tension on price during the topping period. However, I understand that the Special Master believed that Gold Reserve's bid also suffered from a certain (though unquantified) amount of closing risk from the 2020 Bondholders. *See id.* The Special Master (or any willing seller) could have threaded this

needle by declining to offer Gold Reserve the protections of a stalking horse but leveraging the price point of its bid to maximize value and closing certainty in the next round of bidding.

60. [REDACTED] (as discussed in Section I.B.4) and recommended Red Tree as the stalking horse bidder on March 21, 2025. I reviewed Red Tree's bid package, as well as the terms of the TSA, and understand that Red Tree proposed to settle with the 2020 Bondholders for nearly the full value of their alleged claims (approximately \$2.0 billion). D.I. 1596-1 (RT Bid Package); D.I. 1596-2 (RT Bid Package); D.I. 1627-1 (Unredacted TSA). This meant that Red Tree's bid diverted funds that would otherwise be available to the Attached Judgment Creditors despite the fact that the validity of the 2020 Bondholders' claims remains firmly in dispute and there is a serious question as to whether they had the power to block a sale. In my opinion, the fact that Red Tree's bid diverted such significant funds away from the Attached Judgment Creditors to compensate the 2020 Bondholders, regardless of the outcome of their litigation, directly tracks with my long-held concern that the Special Master's elevation of the 2020 Bondholder risk would result in "severe[] discount[s]" in the bidding. D.I. 561-1 ¶ 25.

61. I also reviewed the Special Master's Notice of Recommended Stalking Horse (the "Stalking Horse Recommendation"), D.I. 1596, as well as the briefing and Court order approving the Special Master's Stalking Horse Recommendation that followed. It is clear from the issues raised in those documents that the Special Master justified his recommendation of Red Tree as the stalking horse bidder, in large part, because the Special Master believed that Red Tree's proposed settlement with the 2020 Bondholders offered greater certainty than Gold Reserve that its transaction would close. I understand that the Special Master formed this opinion [REDACTED] [REDACTED] and based on the 2020 Bondholders' representation that, if Red Tree

were not selected, they would, as they repeatedly threatened in their filings in this litigation, seek to block the sale. *See* D.I. 1697 at 2; [REDACTED]

[REDACTED] I further understand, however, that the Special Master did not perform any type of risk analysis to determine whether the 2020 Bondholders' threat to block the sale was outweighed by the significant difference in the offered price. D.I. 1697 at 2–3.

62. In my opinion, there is no rational justification for declining to perform such an analysis. In my decades of experience overseeing corporate mergers and acquisitions, it is not uncommon for the acquiring company to evaluate the litigation risks of the target company that it proposes to acquire. Indeed, the existence of litigation risk and the assessment of that risk are critical factors in evaluating the target company. Such a risk analysis, however, would typically include an assessment of the viability of the claims against the target company. And where the target company has, for example, sustained a series of strategic victories in ongoing litigation, the assessment of that particular risk would rightfully be very low, meaning that it would not significantly impact the underlying evaluation of that target company.

63. Based on my years of experience participating in and advising on corporate mergers and acquisitions as well as my review of the Special Master's Notice of Stalking Horse Recommendation and its supporting documents, as well as the materials provided to me by counsel for PDVH and CITGO regarding the outcome of the Topping Period, I conclude that the Special Master's stalking horse recommendation and his failure to analyze the risk posed by the 2020

Bondholders (a failure he apparently attempted to correct following the Topping Period as described in the Special Master's Final Recommendation (*see* D.I. 1837 ¶ 82(b); *id.* n.20)) had a disastrous effect on the Topping Period and sale process generally such that they failed to maximize value for the PDVH shares.

64. First, the Special Master recommended a stalking horse bid that was almost half the value of the next highest submitted bid. This defeated the entire purpose of a stalking horse bid. A stalking horse bid sets the floor for bidding in the topping period. This means that the price of the stalking horse bid should be as high as possible so that bidders will be forced to compete to beat that price. Choosing a stalking horse bid that was not the highest bid submitted—by a factor of nearly two—clearly signaled to the bidders that the price of their bid in the stalking horse round need only beat the second best bid, and all but foreclosed the possibility that any bid received during the Topping Period would match or exceed Gold Reserve's proposed purchase price. This conclusion was ultimately borne out in the record because no bidder offered a Topping Bid that

[REDACTED]

[REDACTED]. That meant that the Special Master left billions of dollars on the table by selecting Red Tree as the Stalking Horse.

65. Gold Reserve clearly had no incentive to top its own best offer in the previous round of bidding. Indeed, [REDACTED]

[REDACTED] Gold Reserve later submitted a [REDACTED] topping bid on June 25, 2025, offering \$7.382 billion—only about 5 percent more than its stalking horse bid.³ Exhibit 21 at 1. Moreover, the purported increase appears attributable to nothing more

³ I understand that Gold Reserve represented the face value of the Dalinar Bid was \$7.53 billion, Exhibit 21 at 1, but that the Special Master calculates the value of its bid at \$7.382 billion, D.I. 1837 ¶ 69, n.12. I will use the Special Master's calculation when referring to the value of the Dalinar Bid herein.

than Gold Reserve simply folding in the remainder of its own claim (*i.e.*, the credit bid it has sole discretion to include in full or in part with or without receiving additional consideration, but *with* the consequence of increasing the face value of the bid) and the claim of another creditor who agreed to accept non-cash consideration rather than get nothing from the sale. *See id.* at 3–4. Meanwhile, [REDACTED] and [REDACTED], both [REDACTED], submitted topping bids clearly aimed at beating Red Tree’s stalking horse bid, not Gold Reserve’s. [REDACTED] topping bid was only a fractional improvement on Red Tree’s Stalking Horse Bid, *see* Exhibit 22, while [REDACTED] submitted a topping bid with a stated value of [REDACTED], *see* Exhibit 23, and later, [REDACTED].

I understand that a new bidder, Black Lion, also submitted an unsolicited competing bid in the days following the conclusion of the Topping Period. D.I. 1822. Black Lion offered to pay \$8 billion in cash for the PDVH shares. *Id.* at 1. Despite the obvious value of an all-cash offer for the shares, I understand that [REDACTED]. Thus, at the end of the Topping Period, the Special Master was left in a marginally better position than where he started at the end of the stalking horse round.

66. Relatedly, [REDACTED], is a clear indication, in my view, of the failures of the Special Master’s stalking horse recommendation and of the process writ large. Again, while [REDACTED] [REDACTED], in a typical auction for an asset whose fair market value is over \$18 billion, a bid for *less than half* of that amount by a bidder with industry experience should have been the starting point, not the best offer left on the table. The fact that the Special Master received [REDACTED] [REDACTED]

[REDACTED]

[REDACTED]. Had the Special Master designed a process capable of attracting and retaining more bidders like [REDACTED] at the outset, I believe that the sale process would have yielded substantially more value for the PDVH shares.

67. Second, the Special Master's statements about the need to resolve the perceived risk from the 2020 Bondholders' interference in the sale process after he submitted his stalking horse recommendation irrefutably undermined the Topping Period. For example, I understand that when asked how other bidders could mitigate the risk of closing uncertainty during the Topping Period to beat Red Tree's bid, the Special Master stated that one option would be for the bidder to "explain[] to the Special Master's satisfaction how it will be able to close the transaction in the event that the PDVSA 2020 Bondholders succeed in their litigation prior to that closing" and confirm that the bidder "bear[s] the risk of the PDVSA 2020 Bondholder litigation." D.I. 1679 at 2. The other way would be for a bidder to "structure[] its bid in a way that the Special Master was satisfied did not implicate the PDVSA 2020 Bondholder litigation *at all*." *Id.* (emphasis in original); *see also id.* at 4 ("Bidders must propose transactions [with] a high degree of closing certainty, regardless of the outcome of the [2020 Notes] litigation."). In my opinion, both options put an unreasonable restraint on how bidders participated in the Topping Period as evidenced by the fact that bidders continued to engage with the 2020 Bondholders in pursuit of a settlement and divert significant funds to compensate them for their tenuous claims.

68. Based on my review of the bid packages submitted with the topping bids, the Special Master also appears to have been focused throughout the Topping Period on encouraging bidders to settle with the 2020 Bondholders, instead of encouraging them to beat Gold Reserve's

proposed purchase price. Indeed, it appears that it was not until the Special Master met with the Court for an ex parte conference on June 24, 2025 that the Special Master finally decided to recommend a bid that prioritized price over settling with the 2020 Bondholders. D.I. 1840-1 (Ex Parte Hrg. Tr. 59:25–62:15). For example, both [REDACTED] and [REDACTED] included a reference in their bid letters regarding their efforts to [REDACTED], but

[REDACTED]

[REDACTED] affirmatively represented that it intended to [REDACTED]

[REDACTED] Exhibit 22 at 3. Gold Reserve also represented that it had “engaged in extensive, good faith negotiations with the 2020[s] regarding a potential settlement of their claims” during the Topping Period. Exhibit 21 at 11–12. While it appears that no settlement was ever reached, Gold Reserve has, nevertheless, proposed a preferred equity financing worth \$1.8 billion that it could use to compensate the 2020 Bondholders as part of a future settlement, if needed. *Id.* at 2.

69. Thus, it is clear that bidders’ efforts during the topping period—as directed by the Special Master—were focused improperly on devising new ways to settle with the 2020 Bondholders, rather than on maximizing value for the Attached Judgment Creditors. Worse still, [REDACTED]

[REDACTED]

[REDACTED] In my experience, not knowing the price to beat would make it impossible to generate competitive tension approximating an auction, much less facilitate driving bidders to maximize their bids. Therefore, considering the unreasonably low bids received during the Topping Period, it is my opinion that the Special Master’s recommendation of Red Tree as the Stalking Horse had disastrous impacts on the result and that

his recommendation utterly failed to generate competition and maximize value for the PDVH shares.

5. *The Special Master Capitulated to Unreasonable Bidder Demands and Failed to Generate Competitive Tension.*

70. In a typical transaction, it is paramount that the seller maintains a strong negotiating position with the potential buyers to generate negotiating leverage and drive up the price offered for the asset. In my experience, a seller can maintain a strong negotiating position by ensuring that his decisions are guided by the ultimate goal of the sale process, *i.e.*, maximizing the sale price. To do so, the seller should refrain from needlessly granting exclusivity to any one bidder because doing so is only likely to depress or eliminate competition, and the seller should not give in to a bidder's demands simply because he fears that the bidder will walk away from the sale. In fact, if the seller is confident in the strength of his sale process, he should let a bidder walk away rather than give in to their demands and jeopardize his ability to generate a more competitive price for the asset. In my opinion, however, the Special Master exhibited none of these characteristics as he negotiated with bidders in his sale process. In part, this was due to his single focus of concluding a sale regardless of price. In part, it was also due to his failure to consider alternatives, such as an IPO, which would have been used to leverage against bidders if their bids did not reach a reasonable market level. It may also have just been the result of poor negotiating skills. The overwhelming image he conveyed was of someone desperate to sell the shares. In doing so, he surrendered all negotiating leverage.

71. I understand that after the first round of bidding concluded in June 2024, the Special Master pursued additional negotiations with bidders in the following months. D.I. 1837 ¶¶ 30–32. I understand that the Special Master ultimately eliminated all [REDACTED] with whom he continued to seriously negotiate: [REDACTED]. Then, on July 24, 2024,

the Special Master—[REDACTED]—granted [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

72. I understand that on August 8, 2024, the Special Master, [REDACTED]

[REDACTED]
[REDACTED] I understand that during Elliott’s exclusivity period, it conducted significant additional due diligence and that its proposed purchase price ultimately decreased between the submission of its September 2024 bid and its November 2024 bid. [REDACTED]

[REDACTED]
[REDACTED]

[REDACTED] an oversight committee to oversee the day-to-day affairs of CITGO during the period between the entry of the Sale Order and closing, as well as the escrow structures for the 2020 Bondholder and PDVH Alter Ego Litigation funds. D.I. 1446-1 § 6.23 (“Observation Committee”); *id.* at 133–42. I understand that the Special Master did in fact concede to Elliot’s extraordinary and unreasonable demands as demonstrated by the inclusion of those terms in Elliott’s SPA. I understand that on September 26, 2024, the Special Master executed a proposed SPA with Elliott and recommended Elliott’s newly-formed shell company, Amber Energy, as the preliminary winning bidder. *See* D.I. 1325; D.I. 1325-1. I understand, as discussed in Sections I.B.1 and I.B.5, that the Special Master’s preliminary

recommendation faced swift and significant opposition from numerous Attached Judgment Creditors and Sale Process Parties due, in large part, to the fact that Elliott proposed a low purchase price and to hold a significant portion of the sale proceeds in escrow until the 2020 Bondholder and PDVH Alter Ego claims were resolved. *See, e.g.*, Hrg. Tr. (Oct. 1, 2024) at 29:19–21 (Crystallex); *id.* at 42:12–13 (ConocoPhillips); D.I. 1373-4 at 2 (Red Tree and Contrarian); D.I. 1373-5 at 2 (consortium of Attached Judgment Creditors). Finally, I understand that Elliot’s exclusivity period remained in place for nearly *three months*—up to December 18, 2024, when the virtual data room was finally re-opened to other bidders. D.I. 1507 Hrg. Tr. (Dec. 13, 2024) 37:4–13. In my opinion, Elliott’s negotiation tactics, empowered by its exclusive position in the bidding process, not only derailed the first round of bidding, which required a re-start of the process in December 2024, but it also set the blueprint for how Red Tree exploited the inherent weaknesses in the Special Master’s process during the Stalking Horse Round and Topping Period.

73. Extending exclusivity to a single bidder in an M&A process is a powerful privilege. Standard practice provides that exclusivity should be extended to a bidder only where the bid is far and away superior to the other bids (typically by orders of magnitude), the bid is within the range of acceptability, the bid is the result of fully or near-fully completed due diligence such that the seller has confidence that the bid is likely to remain stable during the exclusivity period, the bidder has offered to put some “skin in the game” (*i.e.*, offered equity in the transaction), and the seller has made clear to the bidder that it will terminate the bidder’s exclusivity if the bidder’s demands become unreasonable during the exclusivity period. In short, a bidder should only receive exclusivity as a means to shore up any third-party financing commitments, after the seller has determined that the bid is sufficiently final and is considered reasonable for the asset being sold.

74. Measured against these industry standards, it was not appropriate for the Special Master to grant [REDACTED]. This very likely left the Special Master in the position of feeling compelled to grant exclusivity when Elliott demanded it, rather than re-open negotiations with the other bidders, even though Elliott was in no position to be rewarded with that privilege. In my opinion, however, the Special Master's decision was irrational for four reasons. First, at \$7.286 billion, Elliott's bid was significantly below his own advisor's assessment of the value of the PDVH shares. In my opinion, no willing seller would have ever accepted a price billions of dollars below his and his advisor's own valuation because they feared that the bidder would walk away. This demonstrates the inverted negotiation dynamic between the Special Master and the bidders.

75. Second, Elliott had not come close to completing due diligence when it was granted exclusivity. In fact, I understand that in the months *after* being granted exclusivity, Elliott continued to engage in significant due diligence. D.I. 1507 Hrg. Tr. (Dec. 13, 2024) 37:4–13. Accordingly, the Special Master would have had no reason to assume that Elliott's bid was sufficiently stable to warrant affording it an exclusive negotiation position. With considerable due diligence left to complete, Elliott would also have had the means to materially decrease its bid during the exclusivity period, all the while blaming any subsequent decrease in the price of its bid on information discovered during its continued due diligence (regardless of whether that justification was legitimate or manufactured).

76. Third, in my opinion, the Special Master had significantly less negotiating power than Elliott while it was the exclusive bidder. After the Special Master terminated his [REDACTED], Elliott would have known that the Special Master did not have any other serious bidders with which to compete. Elliott would also have been well aware that the

Special Master was working against a Court-imposed deadline to make a recommendation of a winning bidder. Out of time and out of options, the Special Master was in no position to push back against Elliott's demands as negotiations continued. Indeed, that is likely why the Special Master's proposed SPA with Elliott contained commercially unreasonable terms, such as the oversight committee, and was built around a universally repudiated escrow structure.

77. Fourth, granting bidders [REDACTED] exclusivity rights was not a viable way to increase the price of the PDVH shares or improve the terms of the bids. Rather, if the Special Master had only [REDACTED] bidders left (because he had abandoned negotiations with the other [REDACTED] bidders who had submitted first round bids) at this late stage in the negotiations, then he should have pitted those [REDACTED] bidders against each other and used that competition to the benefit of the sale process and to endeavor to maximize value for the PDVH shares, as the Court directed. The Special Master also could have made clear to [REDACTED] that he would be willing to walk away from their bids, *i.e.*, recommend no winning bidder, if they did not improve the terms of their bids to his satisfaction.

78. I am further of the opinion that Evercore, like the Special Master, was in an untenable negotiating position with Elliott during its exclusivity period. As described in more detail in Section I.B.6 below, the fact that his investment banker, Evercore, would only be paid if it signed a deal with a bidder also materially decreased the likelihood that the Special Master would invoke his authority to not recommend a winning bidder at the conclusion of the sale process. Thus, while the Special Master theoretically had the authority to walk away from Elliott, doing so would foreclose Evercore's ability to obtain its success fee. As such, the Special Master's financial advisor was conflicted. The Special Master, unable or unwilling to walk away from the deal, was therefore unable to exert the kind of negotiating pressure on Elliot that would be typical of other

M&A negotiations. Based on my review of the materials provided to me by my counsel, it is clear to me that Elliott took advantage of Evercore's pecuniary interest in the transaction and the Special Master's reluctance to restart or at least pause the process—even if the only deal left on the table was one laden with unreasonable terms and premised on a price materially below fair market value.

79. The damage caused by the Special Master's error in granting exclusivity could not be undone. And, as with many of the Special Master's process failures, it compounded over time. I understand that after the failure of the Elliott bid, the re-start of the sale process in December 2024, and the submission of stalking horse bids in March 2025, the Special Master found himself in a similarly untenable negotiating position. I reviewed certain documents produced in discovery by the Special Master and shared with me by counsel for CITGO and PDVH where Red Tree explicitly threatened that [REDACTED]. [REDACTED]. See Exhibit 28; Exhibit 29. At that time, only one other bidder remained in the process (Gold Reserve) because I understand that the Special Master deemed the stalking horse bids submitted by [REDACTED] too low to merit serious consideration by the Special Master.

80. Red Tree, like Elliott, exploited the Special Master's vulnerabilities when [REDACTED] and again throughout the topping period. During the Stalking Horse Round, the Special Master once again found himself in the perilous position of running up against a self-imposed deadline for a recommendation with an unacceptably low bid but no viable backup option. While the Special Master could have (and, in my opinion, should have) let Red Tree walk away from the Stalking Horse Round, I am informed that if he had done so [REDACTED]. D.I. 1697 at 2.

81. Like the privileges of exclusivity, the privilege of being named as the stalking horse bidder is significant. Once a bidder is granted that privilege, it is presumptively going to be named the winner of the auction. Here, the stalking horse bidder is also entitled to a generous reimbursement for the fees it incurs as the stalking horse. Bidders know this, which is why the stalking horse position is so coveted. Becoming the stalking horse enhances a bidder's leverage over others in the topping period, and, if no other viable bids are received in the topping period, all but guarantees that it will be the winner.

82. Simply put: in both the first and second rounds of bidding, the bidders who were granted privileged negotiating positions (*i.e.*, Elliott and Red Tree) were aware of the Special Master's and Evercore's vulnerabilities and that the Special Master was under immense pressure to recommend a winning bidder to the Court. Moreover, by granting Elliott exclusivity, extending Red Tree stalking horse protections, and conceding to Elliott's and Red Tree's demands, the Special Master gave up the leverage that he should have had to force Elliott and Red Tree to improve their bids. In my opinion, due to the Special Master's mistakes, both Elliott and Red Tree had free reign to make unreasonable demands during the negotiation process, without any real risk that the Special Master would walk away. And, they did, in fact, do so repeatedly.

83. In my opinion, no willing seller would have allowed the negotiating process to devolve to the degree allowed by the Special Master. Unlike the Special Master, a willing seller would have not granted exclusivity to any bidder, [REDACTED]. He would have, instead, worked in parallel with multiple bidders, making plain that if the bidders did not negotiate in good faith, the process would end in some other alternative process for which he would have been prepared. Even if a willing seller were to enter into exclusive negotiations with a bidder, he would have also set conditions to ensure that such bid was far superior to all others or, at least,

met a price floor (*i.e.*, a certain percentage of the valuation of PDVH). As explained in Section I.B.6, a willing seller would have also ensured that his advisors had proper incentives, which would enable them to recommend no winner or pursue a different path than the bidding if appropriate. This likely would have enabled his advisors to, for example, set a price floor for the PDVH shares or run an alternative transaction in parallel (like a shadow IPO) that bidders knew the Special Master would fall back on if bids were too low. A willing seller also would have pushed back against Red Tree's [REDACTED]

[REDACTED] While the Special Master may have believed [REDACTED], a willing seller would have considered the impact that recommending Red Tree's egregiously low bid would have on *all* of the Attached Judgment Creditors and on his mandate to maximize value for the PDVH shares, [REDACTED]

[REDACTED] Accordingly, in my opinion, if the Special Master had run his process in this way, it would likely have resulted in a materially higher bid price for the PDVH shares. Each of these adjustments to the sale process would have tempered the deleterious effects of granting certain bidders exclusivity and resulted in a higher bid. Therefore, if the sale process is re-run, the Special Master could obtain greater value for the PDVH shares so long as he does not again relinquish his negotiating power to bidders and amends Evercore's fee arrangement to make it a less obvious target for a pressure campaign by a bidder with a patently low bid.

6. *The Special Master's Engagement with Evercore Did Not Create the Proper Incentive Structure for an Advisor.*

84. Finally, as is understood even outside the context of corporate mergers and acquisitions, people do what they are incentivized to do. This means that in any transaction, it is critically important that the incentives for advisors and experts are structured in the right way. Accordingly, in a typical sale process, financial advisors are typically not compensated solely in

the event that the transaction they are advising on actually closes. Such an incentive structure would undoubtedly result in the advisors making any deal—even a bad deal—so long as it was likely to close. Moreover, the right incentive structure must be accompanied by the right advisor. If an advisor does not have the right experience or ability to properly guide a transaction, then the outcome of the transaction will likely be a failure.

85. Unfortunately, per the terms of the Special Master’s fee arrangement, Evercore was incentivized to recommend a winning bid at all costs—even an inadequate one—because its fees are premised on reaching a deal with a bidder. In particular, under the court-approved Evercore retention agreement, if a winning bid is recommended and a transaction takes place, Evercore earns 0.35% of the sale price plus “Company” debt (indeed, Evercore earns \$3.5 million just by *recommending* a bid and *executing* an SPA); but if no deal is reached, Evercore receives no fee beyond the monthly fees it has incurred throughout the process already. D.I. 480-1. In short: no recommended winner would lead to no payout. While the Special Master had the authority to recommend no winner, D.I. 481 ¶¶ 9, 10, 33—a proposal I made, D.I. 355-1 ¶ 22—his heavy reliance on Evercore likely made such authority illusory. As I have explained previously, a process cannot be expected to maximize value if one of its architects stands to benefit only if a deal is signed—even if the appropriate response to a failed process would be recommend no winner. *See* D.I. 354-1 ¶¶ 5(a), (c); *id.* ¶¶ 9–10; *id.* ¶¶ 45–49; D.I. 457-1 ¶¶ 13–21.

86. In my opinion, Evercore’s contingency and restructuring arrangements were contrary to the Special Master’s assigned task. I understand that the Special Master’s directive from the Court was to maximize value, D.I. 277 ¶ 2, and that he had the authority to recommend no winning bidder if his process failed to maximize value D.I. 481 ¶¶ 9, 10, 33. But Evercore had no incentive to adhere to these principles. Evercore’s contingency fee arrangement provided every

incentive for Evercore to recommend a winning bidder—even an inadequate one—rather than recognize that the sale process produced a value-destroying result. Indeed, even if Evercore had acknowledged the value-destroying nature of the sale outcome, it would still benefit more from recommending a deal *now* and collecting its contingency fees than recommending no deal, re-running the sale process, and collecting a fee later. The basic principles of “time value of money” dictate that, under Evercore’s compensation scheme, it would make more sense for Evercore to take a lower commission now than to spend the time re-running the sale in the hopes of a higher commission later. Such incentives are inconsistent with the Court’s directive to the Special Master, as embodied in the charging order and in the provision of the SPO recognizing that *no winner* may be the objectively correct outcome of the sale process (as is the case at present).

87. Evercore’s incentive to recommend a winner at all costs was no secret. As I discuss in Section I.B.5, bidders—supercharged by exclusivity—were aware of Evercore’s incentives, which empowered them to seek deep discounts on their bids, confident that Evercore (and the Special Master) would be more likely to recommend them as the winner rather than recommend that the Special Master tell the Court that no bid was sufficient (leaving hefty fees on the table in the process) or that an IPO, leveraged recapitalization, or other alternative should be pursued. This empowered bidders to make lowball offers and demand unreasonable contractual terms—just as Elliott and Red Tree did.

88. Evercore was also incentivized to reach a settlement with the 2020 Bondholders, even though this incentive was arguably also at odds with the Special Master’s mandate to maximize value for the Attached Judgment Creditors. Under the terms of its Engagement Letter, Evercore would have been entitled to a “Restructuring Fee” in the event that it engaged in a “claims negotiation process and related negotiations with various creditors and claimants including with

respect to the 8.5% Senior Secured Notes issued by PDVSA due 2020.” D.I. 480-1 at 71. In my opinion, the potential of earning an additional fee if it secured a settlement with third-party (putative) creditors did not create the proper incentive for Evercore’s advisory position in this sale. Instead, the fee structure incentivized Evercore to divert time and attention away from securing the best outcome for the Attached Judgment Creditors and to pursue settlement negotiations with the 2020 Bondholders, despite the fact that they do not hold a judgment against PDVSA and are not part of this sale process.

89. In addition to the improper incentives that impaired Evercore’s ability to be an effective and neutral advisor, they were also constrained, in my opinion, by the fact that their experience lies primarily as advisors in bankruptcy transactions. As I have testified before, “[a]lthough Evercore is an excellent, highly respected financial advisory firm, particularly in *bankruptcies*, given the unique circumstances [in this case], I believe that the Special Master and his counsel erred in retaining Evercore to (1) be an advisor to the Special Master; (2) conduct due diligence; (3) develop potential solutions; *and* (4) execute the transaction.” D.I. 354-1 ¶ 5(a) (emphases added). I continue to believe that because Evercore’s primary area of expertise is in advising on bankruptcy cases which all tend to follow the same blueprint, Evercore, “on its own” could never have “provid[ed] the same amount of creative thinking that would have flowed from soliciting proposals” for the sale process “from several firms with varying types of expertise.” D.I. 354-1 ¶ 9. The results of this process tend to bear out my opinions as the Special Master, advised by Evercore, pursued a bankruptcy-adjacent process to sell the PDVH shares (though without the benefits of a bankruptcy sale, such as a discharge), instead of one better suited to maximize the value of a complex commercial asset like the PDVH shares. This error resulted in diminished bidder participation and diminished bids.

II. THE SPECIAL MASTER WAS NOT AND DID NOT BEHAVE LIKE A WILLING SELLER.

90. A willing seller, in my experience, is one who is operating under no compulsion to sell the asset and who makes decisions about the sale process with the goal of obtaining the highest possible value for the asset they are seeking to sell. A willing seller would also be able to manage and mitigate any inherent constraints on the process. I understand that the Special Master claims that he acted as the equivalent of a willing seller, in part, because he was authorized to recommend no winning bidder in the event that a viable bid failed to materialize. *See* D.I. 1522 at 3; D.I. 1527 at 3. Even though the Special Master may have had the authority to not recommend a winning bid, in my opinion, he never considered “walking away” from the sale to be a viable option. For example, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] *See* D.I. 1697 at 2.

91. The Special Master’s support for the indefensible Elliott bids during the 2024 bidding rounds is further evidence of his improper focus on driving a sale forward, regardless of how poor the bids proved to be. Additionally, if the Special Master had exercised his ability to recommend no winning bidder, he would have left his advisor, Evercore, with no chance of collecting a success fee under the terms of its engagement letter. In my opinion, that conflict also left Evercore incentivized to recommend and support a sale even if the result is—as it turned out to be—for billions of dollars less than Evercore’s own valuation.

92. In summary, it is clear that the Special Master did not actually behave as a willing seller. As an initial matter, no willing seller would have persisted with a sale after claiming that there were existential threats to the process from the 2020 Bondholder Litigation and the PDVH

Alter Ego Litigation. Instead, once he exaggerated those risks, the Special Master should have waited for those risks to be resolved or stayed the process until there could be greater clarity about the legitimacy of the risk. That is, in my opinion, precisely what a willing seller would have done in this case. No willing seller would have exaggerated the risk to the sale and then jeopardized the value of the asset by insisting that it be sold in the face of such risks, because doing so would only drive down that value and result in fewer proceeds available to compensate any creditors. The Special Master, by contrast, insisted on pushing the sale process forward.

93. Next, no willing seller would have accepted a deal of the type proposed by Elliott in 2024. In my opinion, a willing seller who found himself faced with a deal that proposed to hand over control of the company and entitlement to profits to the buyer while holding all of the sale proceeds in an escrow until the resolution of contingent liabilities would have refused to even consider it. The Special Master, by contrast, readily accepted and recommended a bid where Elliott proposed to do just that. This, in my opinion, was contrary not only to the Special Master's mandate of maximizing the value of the PDVH shares for the greatest number of creditors, but also to the decision-making process of any rational, willing seller.

94. Relatedly, a willing seller would never have recommended a stalking horse bid that was (1) so far below the fair market value of the asset and (2) less than half the price of the highest price bid that he received in that round of bidding. Again, however, that is precisely what the Special Master did. Rather than create a process by which bidders would be incentivized to compete to drive up the price of the PDVH shares, the Special Master all but ensured that no bidder would be incentivized to markedly improve the price point of its bid. And, as the results of the Topping Period make clear, the bidders acted exactly as they were incentivized to do, [REDACTED]

95. Finally, no willing seller would have ever recommended a winning bid price that fell so far below the fair market value of the property. As referenced herein and in the expert report of Dr. Alberro, the Special Master's investment banker, Evercore, prepared a fair market analysis of the PDVH shares with a midpoint DCF valuation at \$13.2 billion. A willing seller would have used that valuation to set the floor for any bids he received in order to ensure that the process yielded a price that was consistent with his own (and his advisor's own) understanding of the value of the asset. The Special Master, by contrast, recommended a series of bids where the proposed sale price did not even approach the value that Evercore itself ascribed to the PDVH shares. In my opinion, a willing seller would have walked away from a bid that so grossly undervalued the asset he was working to sell, rather than allow it to be sold for a price that was so far below the value he assigned to it.

III. THE SALE PROCESS WILL YIELD A SUBSTANTIALLY HIGHER PRICE FOR THE PDVH SHARES IF IT IS RE-RUN.

96. Based on my review of the record and my decades of professional experience, it is my opinion that the Special Master's sale process failed to maximize value for the PDVH shares and generated a price for the shares that is egregiously low and not remotely indicative of their fair market value even under the circumstances of a forced sale. I am further of the opinion that if the process were re-run, it would result in a greater number of the Attached Judgment Creditors being compensated and an attendant reduction in the debts of PDVSA and the Republic.

97. First, if the sale process were re-run, bidders should also have greater clarity regarding the 2020 Bondholder Litigation and the PDVH Alter Ego Litigation. I understand that the 2020 Bondholder Litigation has advanced to a stage where the Court will soon issue a decision

as to the validity of the 2020 Bonds. I further understand that the 2020 Bondholders have, to this point, suffered a string of losses in the litigation that have undermined their chances of success. If PDVH prevails in the 2020 Bondholder Litigation, bidders will be free to participate in this next round of bidding without any fear that the 2020 Bondholders would work to dismantle the transaction, as they have repeatedly threatened to do. But, even if the 2020 Bonds are found to be valid, bidders can participate with the full knowledge and confidence about that fact, rather than being forced to (perhaps needlessly) discount their bids to account for the risk.

98. Relatedly, and as discussed above, I understand that Judge Rakoff's decision in the *Girard Street* PDVH Alter Ego Litigation was a significant development in those cases. That decision will likely be a positive driver for bidder participation in a new sale process. Indeed, had the Special Master paused the sale process until Judge Rakoff issued his decision in May 2025, more serious bidders could have participated in both the Stalking Horse Round and the Topping Period, likely yielding a higher price for the PDVH shares. Accordingly, with the 2020 Bondholder Litigation nearing its end and PDVH having secured a significant victory in the PDVH Alter Ego Litigation, the risk profile of these liabilities has decreased markedly. Therefore, it is my opinion that if the sale process were re-run it is likely that bidders would be willing to submit higher value bids for the PDVH shares.

99. Second, if the sale process is re-run, it should be done under a new design, and one that is better suited to marketing a complex and nuanced asset like the PDVH shares. I have previously suggested alternatives that could yield a better result than the process that the Special Master designed here, as discussed in Section I.A.

100. If the sale process is re-run, the Special Master could also make the most of the current antitrust regulatory landscape to work to secure pre-clearance or, at minimum, greater

clarity for strategic bidders who may be interested in participating in the process, but whose existing business could pose antitrust concerns. Given the change in administration since this process was initiated in 2023, the Special Master could now take the opportunity to go to the FTC to attempt to secure a more favorable view of the acquisition of CITGO by a strategic bidder. Even a public signal of openness to a relaxed merger review would likely encourage greater participation from strategic bidders.

101. Moreover, the sale process could be re-run without repeating the strategic and tactical blunders that doomed the sale process the first (and second) time. In fact, with a stronger process in place (*i.e.*, one better designed to market and sell the PDVH shares and free from the perception of risks of contingent liabilities), the Special Master will likely find himself in a stronger negotiating position with the bidders.

102. Finally, as discussed above in Section I.B.6, if the sale process is re-run, the Special Master could revisit his engagement letter with Evercore or possibly engage another advisor potentially more suitable to alternative methods of monetizing the stock. It is vital that the Special Master's advisors maintain the appropriate incentives to make the best recommendation possible—even if that means making no recommendation. The wrong incentives lead to the wrong outcome, as demonstrated by the result of this sale process.

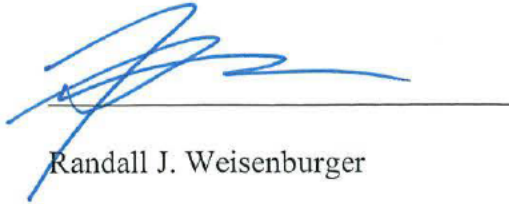
* * *

103. For all the reasons described above, it is my opinion that, contrary to the Special Master's view, the outcome of the sale process that he designed and implemented does not reflect the fair market value of the PDVH shares and that the Special Master did not act like a willing seller in conducting this process. The process was, in my opinion, marred by the Special Master's fundamental structural errors, such as the failure to consider alternative processes that were better

suited to maximizing the value of the PDVH shares, the failure to attract serious strategic bidders, and favoring credit bidders who were able to leverage their attached judgments for their bids—an advantage unavailable to non-credit bidders. Moreover, the Special Master’s strategic errors, including his undue emphasis and exaggeration of the risk profile of both the 2020 Bondholder and the PDVH Alter Ego Litigation, his failure to mitigate regulatory uncertainty, his recommendation of Red Tree as the Stalking Horse Bidder, his repeated capitulation to the demands of bidders and senior creditors, and his engagement of Evercore (including the specifics of his fee arrangement with Evercore) are further evidence of the process defects that undermined the ability to maximize value for the PDVH shares. Nevertheless, it remains my opinion that if the sale process were re-run without repeating these errors, and under a more appropriate design, that it could yield a substantially higher price for the PDVH shares.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on July 7, 2025, at Greenwich, Connecticut.



Randall J. Weisenburger

Exhibits to the Fifth Supplemental Declaration of Randall J. Weisenburger

Exhibit	Description
Exhibit 1	Curriculum Vitae
Exhibit 2	Randall J. Weisenburger Reliance Materials
Exhibit 3	[REDACTED]
Exhibit 4	[REDACTED]
Exhibit 5	[REDACTED]
Exhibit 6	Evercore ISI: Energy – Refining & Marketing (June 18, 2025)
Exhibit 7	[REDACTED]
Exhibit 8	[REDACTED]
Exhibit 9	[REDACTED]
Exhibit 10	[REDACTED]
Exhibit 11	[REDACTED]
Exhibit 12	[REDACTED]
Exhibit 13	[REDACTED]
Exhibit 14	[REDACTED]
Exhibit 15	[REDACTED]
Exhibit 16	[REDACTED]
Exhibit 17	[REDACTED]
Exhibit 18	[REDACTED]
Exhibit 19	[REDACTED]
Exhibit 20	[REDACTED]
Exhibit 21	June 25, 2025 Bidder D Bid Letter
Exhibit 22	[REDACTED]
Exhibit 23	[REDACTED]
Exhibit 24	[REDACTED]
Exhibit 25	[REDACTED]

Exhibit	Description
Exhibit 26	[REDACTED]
Exhibit 27	[REDACTED]
Exhibit 28	[REDACTED]
Exhibit 29	[REDACTED]
Exhibit 30	[REDACTED]

Exhibit 1

Randall J. Weisenburger, Founder and Managing Partner of Mile 26 Capital



Randall Weisenburger started Mile 26 Capital in January 2015. Previously, Mr. Weisenburger was the Executive Vice President and Chief Financial Officer of Omnicom Group Inc. (NYSE: OMC) from 1998 through 2014.

Omnicom, headquartered in New York City, is a strategic holding company that manages a global portfolio of leading marketing and corporate communications agencies. During his 14 year tenure with Omnicom, the firm completed more than 400 strategic acquisitions, driving revenues from \$4.2 billion to more than \$15.3 billion in 2014. Omnicom's branded networks and numerous specialty firms provide advertising, strategic media planning and buying, direct and promotional marketing, public relations, interactive/digital media services and other specialty communications services to clients in more than 100 countries.

Before joining Omnicom, Mr. Weisenburger was a founding member of Wasserstein Perella and a former member of the First Boston Corporation. He left First Boston in 1988 with Bruce Wasserstein, Joe Perella and others to form Wasserstein Perella & Company ("WP"). While at WP, he specialized in private equity investing and leveraged acquisitions. From 1993 through 1998, Mr. Weisenburger was President and Chief Executive Officer of the firm's merchant banking subsidiary Wasserstein & Co. Additionally, he held various roles within WP's portfolio of investment companies including: Co-Chairman of Collins & Aikman Corp, CEO of Wickes Manufacturing, Vice Chairman of Maybelline Inc., and Chairman of American Law Media.

Mr. Weisenburger currently serves as a member of the Boards of Directors of Carnival Corporation & plc (NYSE: CCL), Valero Energy Corporation (NYSE: VLO), Corsair Gaming, Inc. (NASDAQ: CRSR) and MP Materials Corp. (NYSE: MP). Mr. Weisenburger previously served as a member of the Board of Overseers of the Wharton School of Business at the University of Pennsylvania; as a trustee of Eisenhower Fellowships; a member of the Board of Directors of the New York City Health & Hospital Foundation; a Director of the US Ski and Snowboard Foundation and the Board of CTS Corp.

He holds a Masters Degree in Business Administration from the Wharton School of Business (1987), where he was named the Herny Ford Scholar, and a Bachelors Degree in Finance and Accounting from Virginia Tech (1980).

Current Boards:

Carnival Corporation and plc (CCL)

2009 to Present

- Lead Independent Director
- Chair of the Compensations Committee
- Member of the Compliance Committee
- Member of the HESS Committee
- Member of the Nominating and Governance Committee

Valero Energy Corp (VLO)

2014 to Present

Corsair Components Inc. (Private)

2018 to Present

- Chairman of the Audit Committee

MP Materials Corp. (MP)

2017 to Present

- Lead Independent Director
- Chairman of the Audit Committee
- Member of the Compensation Committee

Exhibit 2

Randall J. Weisenburger Reliance Materials

Date	Document
Docket References	
5/27/2021	D.I. 277 – Order Regarding the Special Master
8/9/2021	D.I. 303 – Special Master’s Report and Recommendation Regarding Proposed Sale Procedures Order
8/25/2021	D.I. 317-1 – Declaration of Randall J. Weisenburger (Filed under Seal)
9/10/2021	D.I. 340-1 – Supplemental Declaration of Randall J. Weisenburger (Filed under Seal)
9/15/2021	D.I. 348 – Special Master’s Report and Recommendation Regarding Proposed Sale Procedures Order
9/20/2021	D.I. 354-1 – Declaration of Randall J. Weisenburger (Redacted)
9/20/2021	D.I. 355-1 – Supplemental Declaration of Randall J. Weisenburger (Redacted)
11/24/2021	D.I. 411-1 – Third Revised Proposed Sale Procedures Order
12/17/2021	D.I. 423-1 – Second Supplemental Declaration of Randall J. Weisenburger
12/17/2021	D.I. 423-2 – Updated Chart Summary and Status of Sale Process Parties’ Objections
4/11/2022	D.I. 457-1 – Third Supplemental Declaration of Randall J. Weisenburger
8/5/2022	D.I. 472 – Joint Status Report
10/4/2022	D.I. 480-1 – Sixth Revised Proposed Sale Procedures Order and Redline
10/11/2022	D.I. 481 – Sixth Revised Proposed Sale Procedures Order (entered)
5/23/2023	D.I. 561 – Venezuela Parties’ Objections to the Special Master’s Supplemental Report
5/23/2023	D.I. 561-1 – Fourth Supplemental Declaration of Randall J. Weisenburger
6/5/2023	D.I. 583 – Special Master’s Reply to Venezuela Parties’ Objections to Supplemental Report
7/17/2023	D.I. 643 – Memorandum Order Overruling Objections to Special Master’s Supplemental Report and Recommendation
4/3/2024	D.I. 1102 – Final Priority Order
5/8/2024	D.I. 1144 – Venezuela Parties’ Objection to Special Master’s Modification of Bidding Procedures
5/17/2024	D.I. 1513 – Transcript of Hearing Before the Honorable Judge Leonard P. Stark

Date	Document
9/9/2024	D.I. 1248 – Special Master’s Motion to Enjoin the Alter Ego Claimants from Enforcing Claims Against the Republic or PDVSA by Collecting from PDVH or Its Subsidiaries in Other Forums
9/9/2024	D.I. 1249 – Special Master’s Opening Brief in Support of Motion to Enjoin the Alter Ego Claimants from Enforcing Claims Against the Republic or PDVSA by Collecting from PDVH or Its Subsidiaries in Other Forums
9/17/2024	D.I. 1277 – Crystallex’s Brief in support of Special Master’s Motion to Enjoin the Alter Ego Claimants from Enforcing Claims Against the Republic or PDVSA by Collecting from PDVH or Its Subsidiaries in Other Forums
9/24/2024	D.I. 1307-1 – Exhibit 16 to Taft Declaration- Transcript of May 17, 2024 Hearing Before the Honorable Judge Leonard P. Stark
9/27/2024	D.I. 1323 – Special Master’s Status Report
9/27/2024	D.I. 1325 – Notice of Special Master’s Recommendation D.I. 1325-1 – Proposed Stock Purchase Agreement between Amber Energy Inc. and Robert B. Pincus
10/9/2024	D.I. 1357 –Transcript of Oct. 1, 2024 Hearing
10/18/2024	D.I. 1365 – Amicus Curiae Submission of Prospective Buyer Amber Energy Inc. (Filed under Seal)
10/18/2024	D.I. 1373 – Special Master’s Status Report Pursuant to Oct. 2 Order [1339] D.I. 1373-1 – Exhibit A – Proposed Timeline D.I. 1373-2 – Exhibit B-1 – Crystallex Statement D.I. 1373-3 – Exhibit B-2 – Amber Energy Statement D.I. 1373-4 – Exhibit B-3 – Red Tree and Contrarian Statement D.I. 1373-5 – Exhibit B-4 – Alternative Proposal Judgment Creditors Statement D.I. 1373-7 – Exhibit B-6 – Huntington Ingalls Statement
10/18/2024	D.I. 1374 – Special Master’s Letter re Injunction Briefing and Alter Ego Determination
10/18/2024	D.I. 1375 – Status Report of Ad Hoc Group of Holders of PDVSA 2020 Bonds and the Trustee and the Collateral Agent for the Bonds regarding Oct. 2 Order [1339] D.I. 1375-1 – Exhibit A – Rider to Joint Status Report
10/18/2024	D.I. 1377 – Status Report of CITGO, PDVH, and PDVSA regarding Oct. 2 Order [1339] (Filed under Seal)
10/23/2024	D.I. 1390 – Amber Energy’s Memorandum in Support of Redactions to Amicus Curiae Submission
10/23/2024	D.I. 1391 – PDVH and CITGO’s Memorandum in Support of Redactions to Amicus Curiae Submission D.I. 1391-1 – Exhibit A – Proposed Redactions
11/6/2024	D.I. 1414 – Special Master’s Status Report Regarding Amber Energy Alternative Transaction Proposal D.I. 1414-1 – Amber Energy Letter and Alternative Transaction Proposal
11/7/2024	D.I. 1417 – Rusoro, OIEG, and Gold Reserve’s Response to Alternative Transaction Proposal

Date	Document
11/26/2024	D.I. 1446-1 – Unredacted Stock Purchase Agreement
12/3/2024	D.I. 1459 – CITGO and PDVH’s Answering Brief Pursuant to The Court’s November 20, 2024 Order and Inclinations
12/6/2024	D.I. 1481 – Special Master’s Omnibus Reply to Opening Positions on the Court’s November 20, 2024 Order
12/11/2024	D.I. 1493 – Order Denying Motion to Enjoin and Setting Questions for December 13 Status Conference
12/19/2024	D.I. 1507 – Transcript of Dec. 13, 2024 Status Hearing
12/23/2024	D.I. 1510-1 – Special Master’s Proposed Timeline
12/23/2024	D.I. 1511-1 – PDVH and CITGO’s Proposed Timeline
12/30/2024	D.I. 1515 – Opinion Denying Special Master’s Motion to Enjoin the Alter Ego Claimants from Enforcing Claims Against the Republic or PDVSA by Collecting from PDVH or Its Subsidiaries in Other Forums
12/31/2024	D.I. 1517 – Memorandum Order Regarding Sale Process and Litigation
1/8/2025	D.I. 1522 – Special Master’s Positions on Open Matters Regarding the Sale Process
1/14/2025	D.I. 1527 – Special Master’s Answering Brief on Open Matters Regarding the Sale Process
1/23/2025	D.I. 1553 – Submission of 2020 Bondholders in Response to Briefing Over the Special Master’s January 14, 2025 Joint Status Report
1/27/2025	D.I. 1554 – Memorandum Order Regarding Open Matters
2/12/2025	D.I. 1558 – Objection of 2020 Bondholders to the Draft Long-Form Stock Purchase Agreement
2/24/2025	D.I. 1571 – Memorandum Order Regarding Objections to SPA
3/4/2025	D.I. 1583 – Memorandum Order Regarding Non-Cash Consideration
3/21/2025	D.I. 1596 – Notice of Special Master’s Recommendation of Stalking Horse D.I. 1596-1 – Exhibit A – Stalking Horse Agreement D.I. 1596-2 – Exhibits B – F
3/21/2025	D.I. 1600 – Amended and Restated Transaction Support Agreement (Filed Under Seal)
3/27/2025	D.I. 1627-1 – Unredacted Transaction Support Agreement
3/31/2025	D.I. 1635 – Rusoro’s Objection to Special Master’s Recommendation
3/31/2025	D.I. 1636 – Gold Reserve’s Objection to Special Master’s Recommendation
3/31/2025	D.I. 1637 – U.S. Bank National Assoc. Reservation of Rights in Response to Notice of Special Master’s Recommendation of Stalking Horse
3/31/2025	D.I. 1638 – Koch’s Objection to Special Master’s Recommendation

Date	Document
3/31/2025	D.I. 1639 – Venezuela Parties’ Objection to Special Master’s Recommendation (Filed Under Seal)
3/31/2025	D.I. 1640 – Siemens Energy’s Joinder to Objections to Notice of Special Master’s Recommendation of Stalking Horse
3/31/2025	D.I. 1644 – Venezuela Parties’ Objection to Special Master’s Recommendation (Redacted)
4/3/2025	D.I. 1658 – Crystallex’s Response to Objections to Special Master’s Recommendation
4/3/2025	D.I. 1659 – ConocoPhillips’s Response to Objections to Special Master’s Recommendation
4/3/2025	D.I. 1660 – Special Master’s Response to Objections to Special Master’s Recommendation
4/3/2025	D.I. 1661 – Response of 2020 Bondholders to March 31, 2025 Objections to the Notice of Special Master’s Recommendation of Stalking Horse
4/3/2025	D.I. 1662 – OIEG’s Joinder to the Responses in Support of Special Master’s Recommendation
4/4/2025	D.I. 1664 – Rusoro’s Reply in Support of Objections to Recommendation
4/4/2025	D.I. 1665 – Koch’s Reply in Support of Objections to Recommendation
4/4/2025	D.I. 1666 – Venezuela Parties’ Reply in Support of Objections to Recommendation
4/4/2025	D.I. 1667 – Gold Reserve’s Reply in Support of Objections to Recommendation
4/9/2025	D.I. 1675 – Red Tree’s Response to Court’s Questions Regarding Recommendation of Stalking Horse Bidder D.I. 1675 – Red Tree’s Exhibit A
4/9/2025	D.I. 1676 – Crystallex’s Response to Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/9/2025	D.I. 1677 – Response of 2020 Bondholders to the Court’s April 5, 2025 Order
4/9/2025	D.I. 1678 – ConocoPhillips’s Response to Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/9/2025	D.I. 1679 – Special Master’s Opening Brief on Questions Regarding the Stalking Horse Recommendation
4/9/2025	D.I. 1680 – Gold Reserve, Rusoro, and Koch’s Response to Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/9/2025	D.I. 1681 – Venezuela Parties’ Response to Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/9/2025	D.I. 1682 – Gold Reserve, Rusoro, and Koch’s Response to Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/11/2025	D.I. 1688 – Red Tree’s Answering Brief Regarding Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/11/2025	D.I. 1689 – ACL and OIEG’s Answering Brief Regarding Court’s Questions Regarding Recommendation of Stalking Horse Bidder

Date	Document
4/11/2025	D.I. 1690 – Rusoro’s Answering Brief Regarding Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/11/2025	D.I. 1692 – Crystallex’s Answering Brief Regarding Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/11/2025	D.I. 1693 – Response of 2020 Bondholders Regarding Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/11/2025	D.I. 1695 – Koch’s Answering Brief Regarding Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/11/2025	D.I. 1696 – Gold Reserve’s Answering Brief Regarding Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/11/2025	D.I. 1697 – Venezuela Parties’ Answering Brief Regarding Court’s Questions Regarding Recommendation of Stalking Horse Bidder
4/12/2025	D.I. 1699 – Reply of 2020 Bondholders Regarding the April 11, 2025 Submissions
4/16/2025	D.I. 1728 – Order Regarding Inclinations Regarding Selection of Stalking Horse Bid
4/21/2025	D.I. 1741 – Order Adopting Recommendation of Red Tree as Stalking Horse and Overruling Objections
5/23/2025	D.I. 1757 – Venezuela Parties’ Motion for an Extension of the Topping Period
5/26/2025	D.I. 1763 – Special Master’s Response to the Venezuela Parties’ Motion for an Extension of the Topping Period
5/27/2025	D.I. 1770 – Special Master’s Further Response to the Venezuela Parties’ Motion for an Extension of the Topping Period
5/30/2025	D.I. 1779 – Order Granting Venezuela Parties’ Motion for an Extension of the Topping Period
6/11/2025	D.I. 1799 – Order Setting Deadlines for Briefing and Discovery
6/23/2025	D.I. 1822 – Black Lion Capital Advisors Letter Regarding Qualified Irrevocable Bid
7/2/2025	D.I. 1837 – Notice of Special Master’s Final Recommendation
7/2/2025	D.I. 1838 – Declaration of William O. Hiltz in support of Special Master’s Final Recommendation D.I. 1838-1 – Exhibits A-B
7/2/2025	D.I. 1840-1 – Transcript of June 24, 2025 Ex Parte Meeting of the Court and the Special Master

Document
Sale Process Documents
Project Horizon - Confidential Information Memorandum
Project Horizon - Teaser
Project Horizon - Evercore Valuation of CITGO (draft dated September 14, 2023)
Project Horizon - Marketing Summaries (dated October 27, 2023)
Project Horizon - Management Presentation
Project Horizon - Evercore Redacted Bid Summary (dated February 2, 2024)
Project Horizon - Non-Binding Indication of Interest 1 (HC - Redacted)
Project Horizon - Non-Binding Indication of Interest 2 (HC - Redacted)
Project Horizon - Non-Binding Indication of Interest 3 (HC - Redacted)
Project Horizon - Non-Binding Indication of Interest 4 (HC - Redacted)
Project Horizon - Non-Binding Indication of Interest 5 (HC - Redacted)
Project Horizon - Non-Binding Indication of Interest 6 (HC - Redacted)
Project Horizon - Non-Binding Indication of Interest 7 (HC - Redacted)
Project Horizon - Non-Binding Indication of Interest 8 (HC - Redacted)
Project Horizon - Non-Binding Indication of Interest 9 (HC - Redacted)
Project Horizon - Non-Binding Indication of Interest 10 (HC - Redacted)
Project Horizon - Non-Binding Indication of Interest 11 (HC - Redacted)
Project Horizon - Non-Binding Indication of Interest 12 (HC - Redacted)
Project Horizon - Second Round Bid Summary (dated June 17, 2024)
Project Horizon - Bidder 1 Second Round Bid (HC - Redacted)
Project Horizon - Bidder 2 Second Round Bid (HC - Redacted)
Project Horizon - Bidder 3 Second Round Bid (HC - Redacted)
Project Horizon - Bidder 4 Second Round Bid (HC - Redacted)
Project Horizon - Bidder 5 Second Round Bid (HC - Redacted)
Project Horizon - Bidder 6 Second Round Bid (HC - Redacted)
Project Horizon - Second Round Unredacted Bid Summary (dated June 27, 2024)
Project Horizon - Bidder A Second Round Bid (dated June 11, 2024) (HC - Unredacted)
Project Horizon - Bidder B Second Round Bid (dated June 11, 2024) (HC - Unredacted)
Project Horizon - Bidder C Second Round Bid (dated June 11, 2024) (HC - Unredacted)
Project Horizon - Bidder D Second Round Bid (dated June 11, 2024) (HC - Unredacted)
Project Horizon - Bidder E Second Round Bid (dated June 11, 2024) (HC - Unredacted)
Project Horizon - Bidder F Second Round Bid (dated June 11, 2024) (HC - Unredacted)
Project Horizon - Second Round Unredacted Bid Summary (dated July 16, 2024)
Project Horizon - Bidder A Updated Bid Materials (dated June 27, 2024)

Document
Project Horizon - Bidder B Updated Bid Materials (dated June 27, 2024)
Project Horizon - Bidder C Updated Bid Materials (dated June 27, 2024)
Project Horizon - Bidder D Updated Bid Materials (dated June 27, 2024)
Project Horizon - Bidder F Updated Bid Materials (dated June 27, 2024)
Project Horizon - Evercore Email to Bidder A re CITGO/PDVH Financials (dated July 2, 2024)
Project Horizon - Evercore Email to Bidder B re CITGO/PDVH Financials (dated July 2, 2024)
Project Horizon - Evercore Email to Bidder C re CITGO/PDVH Financials (dated July 2, 2024)
Project Horizon - Evercore Email to Bidder D re CITGO/PDVH Financials (dated July 2, 2024)
Project Horizon - Evercore Email to Bidder E re CITGO/PDVH Financials (dated July 2, 2024)
Project Horizon - Evercore Email to Bidder F re CITGO/PDVH Financials (dated July 2, 2024)
Project Horizon - Bidder B Updated Bid Materials (dated July 10, 2024)
Project Horizon - Bidder C Updated Bid Materials (dated July 10, 2024)
Project Horizon - Bidder E Updated Bid Materials (dated July 10, 2024)
Project Horizon - Bidder F Updated Bid Materials (dated July 10, 2024)
Project Horizon - Bidder B Revised Stock Purchase Agreement (dated July 15, 2024)
Project Horizon - Bidder C Revised Stock Purchase Agreement (dated July 15, 2024)
Project Horizon - Bidder C Revised Stock Purchase Agreement (dated July 15, 2024)
Project Horizon - Bidder B Revised Stock Purchase Agreement (dated July 14, 2024)
Project Horizon - Evercore Draft Bid Summary (dated July 22, 2024)
Project Horizon - ProForma Cap Table and Sources and Uses (dated July 22, 2024)
Project Horizon - Bidder B Updated Bid Materials (dated July 19, 2024)
Letter from N. Eimer to R. Pincus (dated July 11, 2024)
Letter from N. Eimer to R. Pincus (dated July 25, 2024)
Project Horizon - Evercore Draft Bid Summary (dated July 29, 2024)
Project Horizon - Bidder F Updated Bid Materials (dated July 27, 2024)
Project Horizon - Bidder B Bid Materials (dated June 11, 2024)
Project Horizon - Bidder B Bid Materials (dated June 27, 2024)
Project Horizon - Bidder B Bid Materials (dated July 10, 2024)
Project Horizon - Bidder B Updated SPA (dated July 26, 2024)
Project Horizon - Bidder C Bid Materials (dated June 11, 2024)
Project Horizon - Bidder C Revised Bid Materials (dated June 27, 2024)
Project Horizon - Bidder C Revised Bid Materials (dated July 10, 2024)
Project Horizon - Bidder C Updated SPA (dated July 26, 2024)
Project Horizon - Bidder F SPA (dated June 11, 2024)
Project Horizon - Bidder F Bid Materials (dated June 11, 2024)
Project Horizon - Bidder F Revised Bid Materials (dated June 27, 2024)

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Project Horizon - Bidder F Revised Bid Materials (dated July 10, 2024)
Project Horizon - Bidder F Revised Bid Materials (dated July 27, 2024)
Project Horizon - Bidder C Updated SPA (dated August 26, 2024)
Project Horizon - Bidder C Updated SPA (dated September 13, 2024)
Project Horizon - Bidder C Updated SPA (dated September 26, 2024)
Project Horizon - Bidder C Updated SPA (dated September 27, 2024)
Project Horizon - Bidder D Stalking Horse Bid Submission (dated March 12, 2025)
Project Horizon - Bidder C Stalking Horse Bid Submission (dated March 7, 2025)
Project Horizon - Bidder F Stalking Horse Bid Submission (dated March 7, 2025)
CPC 2024 Annual Report
CPC 2025 Q1 Report
Project Horizon - Bidder D Revised Bid Materials (dated June 25, 2025)
Project Horizon - Bidder D Updated SPA (dated June 25, 2025)
Project Horizon - Black Lion Bid Letter (dated July 25, 2025)
Project Horizon - Bidder C Revised Bid Materials (dated June 18, 2025)
Project Horizon - Bidder D Revised Bid Materials (dated June 25, 2025)
Project Horizon - Bidder A Revised Bid Materials (dated June 25, 2025)
Project Horizon - Bidder F Revised Bid Materials (dated June 25, 2025)
Project Horizon - Bidder F Revised Bid Materials (dated June 30, 2025)
Project Horizon - Bidder D Bid Letter (dated June 18, 2025)
Project Horizon - Evercore Draft Presentation to the Court June 14, 2021 (SM0038243)
Project Horizon - Evercore Draft Presentation – September 2023 (SM0042317)
Evercore ISI: Energy – Refining & Marketing (June 18, 2025)
September 23, 2024 Email Communications (SM0036442)
July 25, 2024 Letter from N. Eimer to R. Schrock
August 7, 2024 Letter from N. Eimer to R. Schrock
March 9, 2025 Email Communications (SM0052144)
March 14-15, 2025 Email Communications (SM0058796)
March 19, 2025 Email Communications (SM0076125)
March 16, 2025 Email Communications (SM0060032)
March 19, 2025 Email Communications (SM0061028)
July 31, 2024 Email Communications (SM0033002)
March 14, 2025 Email Communications (SM0056722)
March 14, 2025 Email Communications (SM0072741)
August 2, 2024 Email Communications (SM0033056)

Weisenburger Exhibits 3–5

Filed Under Seal Pursuant to D.I. 1887

Exhibit 6

EVERCORE ISI

Energy | Refining & Marketing

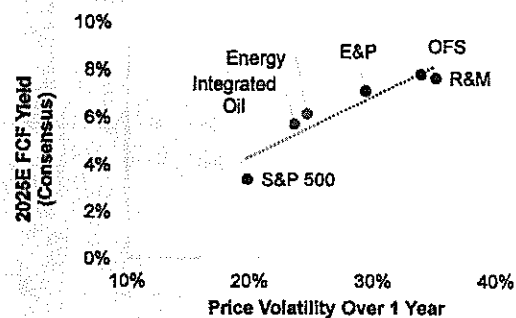
June 18, 2025

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Margins (\$/barrel)	2024	2025E	2026E	2027E
GC 3-2-1 MEH	15.43	17.45	15.00	16.00
MW 3-2-1 WTI	16.70	20.84	17.00	18.00
WC 3-2-1 ANS	22.66	26.28	22.50	26.00
Europe 3-2-1 Brent	14.88	13.82	13.50	15.00
Asia 3-2-1 Dubai	10.77	11.80	11.50	13.00
Brent-WTI	4.95	3.52	3.25	4.00
WTI-WCS	14.79	11.95	14.25	15.00
Brent	80.76	80.15	70.00	70.00

Ticker	Company	Rating	Target Price
PSX	Phillips 66	Outperform	130
MPC	Marathon Petroleum	In Line	170
VLO	Valero	In Line	135

Refining & Marketing: Balanced Risk and Reward



Source: FactSet, Evercore ISI Research

Post Cycle, Not Post Relevance: Long Tailed Assets w/ Volatility Capture

"Rumors of [the] demise [of refining] have been greatly exaggerated" - PSX (Outperform), MPC (In Line) and VLO (In Line).

The post-COVID recovery and geopolitical disruptions of 2022/23 (Ukraine) proved a boon for refiners. Domestic refiners have benefitted from a decade+ of domestic oil supply, robust export opportunities, and lower regulatory burden / advantaged operating costs (*read, cheap domestic NG*). These trends have placed US refining at the low end of the global cost curve aided by scale, logistics, and input costs. We are initiating with a neutral view of the sector broadly, acknowledging the peaks for refining margins in the 2021-2024 are far from normalized and street estimates for 2026 are too high. That said, we see a place in Energy portfolios for refining stocks in the context of still resilient product demand (despite the well-publicized demise), capital / asset structures that position refining assets as capital return machines, and a unique ability of the industry to capture the value of volatility in oil markets. A well-supplied oil market with still durable aggregate product demand is a good outcome for refiners vs. other energy subsectors.

The ever-elusive mid-cycle refining margin. We are assuming mid-cycle conditions with USGC cracks at \$16/bbl. The global CDU balance saw 4.8 mmbpd of capacity shut downs in the post COVID period (driven by economics and policy). The market has been perennially fearful of new starts of world scale facilities that promise to shift product availability and flows (Nigeria-Dangote, Mexico-Olmeca, Kuwait-Al Zour). Clearer today are the challenges of new starts, and the attrition of existing units putting net CDU adds in context. We see net adds at 0.05, 1.05 and 0.40 mmbpd in 2025/26/27 respectively (which should keep domestic utilization rates relatively constant). At our mid-cycle margin assumptions, we see the stocks trading at 7.5x 2026 EV/EBITDA and 8% downside to 2026 consensus EBITDA.

PSX (Outperform) We expect the debate on future strategy and capital priorities to continue. We see merit in the integrated model, if execution and value delivery follow. Midstream acquisitions have consumed investor focus, while refining performance has improved. Stronger execution in refining, evidence of integration / performance from Midstream, and strategic clarity on the forward portfolio plan should be welcome by shareholders. We see PSX at a 10% discount to peers.

MPC (In Line) enjoys a much-simplified refining and midstream asset position with an appealing structure where the distribution from MPLX (~63% owned) support both the MPC dividend and sustaining capital. The market has been fearful of the 'buyback cliff' as the outsized shareholder returns post Speedway dissipated. We see 2H momentum in the core refining business with a 'last man standing' dynamic in California and continued commercial momentum at MPLX. MPC has outperformed the sector by 700 bps YTD.

VLO (In Line) the pure play with a long track record of delivery, operational execution, cost control and notably managing street expectations. VLO has focused on refining first with a significant US Gulf Coast weighting, scale, and complexity that positions it well for the environment over the near to medium term. Benicia shut down will limit California market exposure and bring additional costs into 2026, while the Renewable Diesel segment will struggle to break even despite a best-in-class feedstock position.

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Refining & Marketing – Key Debates

Can global refined product demand keep growing?	We expect global refined product demand to keep growing, but at a slower pace. Higher fuel economy and emissions standards remain significant threats to oil demand over the near to medium term with developed world governments and industry coalescing around end decade (or mid-2030s) phase out of ICE vehicles (clearly slipping to the right, +tive refiners). Should government mandates to boost biofuel use see follow through, light petroleum product demand is expected to decline over the longer run.
What is the outlook for Global refining capacity growth?	Global capacity growth is constrained due to limited greenfield refinery completions and refinery expansions offset by continued closures. Over the 2024/27 cycle we see 12 major projects adding 2,500 MBPD of capacity, partially offset by 1,270 MBPD of capacity loss from 9 announced closures.
Can the global refined product market find balance?	<p>We assume <i>annual</i> supply adds (380 MBPD) overshoot demand growth (190 MBPD) over the forecast period (2025-2027). For 2025, we project healthy gasoline and distillate demand, as retail prices for both products have fallen to multi-year lows despite macroeconomic volatility. The recent depreciation of the US dollar has further reduced fuel costs for importing countries, providing an additional tailwind for consumption.</p> <p>Regionally, we project ~\$16.15/bbl refining margins on the Gulf Coast over 2025-2027, which is \$1.35/bbl (9%) higher than the average of ~\$14.80/bbl during 2011-2024 post shale boom.</p>
Are terminal value concerns overstated?	We don't see material risks from falling product demand trends for US refiners well into the 2030s. The US refining industry can maintain high utilization rate to address resilient (if low growth) domestic demand and serve export markets (primarily Mexico & Latin America). However, a fall in US refining throughput is likely along with drops in light products demand, pressuring operating rates post 2030s. Integrated refineries and petrochemical complexes may stay competitive to reflect shifts in the downstream: more petrochemical demand with less motor gasoline and diesel demand over time.
How are the US refiners positioned vs international peers?	<ul style="list-style-type: none"> • US refiners' yields on light products are higher • US refiners enjoy access to advantaged crude feedstocks • US refiners lead global utilization rates • US refiners enjoy an energy cost advantage (natural gas, electricity, etc) • Carbon costs and accounting are proving an additional cost burden on international refiners (particularly European units)
What do current margins and futures imply for consensus earnings / EBITDA expectations?	We see upside to 2025 refining & marketing earnings, but downside to street 2026 expectations. Our earnings estimates are 12% above consensus in 2025 (6% for EBITDA), 22% below consensus in 2026, and 7% below consensus in 2027 (based on our mid-cycle refining margin assumptions).
Are the US refiners overvalued?	<p>Neutral view of refining equities driven by current valuations, and the 2022/23 peak for margins unlikely to be replicated near-term. R&M ROCE is approaching 10% in the next few years on our margin deck, while EV/CE is currently near 1.5x, slightly above mid-cycle 1.4x. EV/EBITDA, P/E and P/CF multiples are above historical averages. P/FCF multiple remains below historical average due to capital discipline.</p> <p>Relative to S&P 500, refiner valuations are modestly above historical average multiples (at a deep discount vs the market).</p>

Thesis Statements & Points of Differentiation


Phillips 66

PSX
Outperform
PT: \$130

PSX has worked to improve performance in refining and better define the value proposition for shareholders (well-articulated and more reasonable mid-cycle EBITDA assumptions, clear shareholder returns drivers, balance sheet targets). Our sense is acquisitions in Midstream have surprised to the upside both in terms of absolute size and number, worrying the market that more capital deployed was needed here to realize the full value of the network and the integrated strategy. Post a recent proxy contest, all indications suggest the debate over the integrated model and future design of the portfolio continues. Additional strategic clarity and execution (particularly in refining) should help narrow the valuation gap vs. peers.


Marathon Petroleum

MPC
In-Line
PT: \$170

MPC has outpaced peers over the past 5 years driven by a unique downstream / midstream asset configuration (via MPLX), solid execution through the post-COVID period of turnarounds and other market disruptions (delivering refining margins to the bottom line) and a well-timed (and priced) exit of the retail business which served to bolster shareholder returns. On a forward basis we see a sustainable and well risked outlook towards high single digit shareholder returns and growth. We see a 'last man standing' dynamic in California offering an outsized return opportunity for MPC (despite regulatory risks) and upside to 2H estimates from the Mid-Continent. Our investment view is colored by recent performance vs. the sector likely reflecting optimism surrounding California, and the tailwind afforded the re-rating at MPLX over the past 2-3 years.


Valero

VLO
In-Line
PT: \$135

We see fears around falling petroleum product demand particularly in the OECD as overblown and expect a longer duration demand horizon for transportation fuels than regulatory frameworks, electrification efforts, or net zero ambitions suggest. Further we see supply side rationalization of marginal refining assets continuing particularly in the OECD. This should leave VLO with both advantaged assets (feedstock and market access) but also advantaged cost (regulatory burden, utilities) vs. peers. We have a lot of respect for the track record of delivery and strategic positioning at VLO, and while there are some potential positives on the horizon (widening light/heavy, return of Russian barrel to the Atlantic basin) the stock has outperformed as refining margins and expectations bottomed in early 2Q. A better entry point is likely as expectations shift and VLOs long term positioning and value proposition remain unchanged.

Differentiator	What Sets Us Apart	Why it Matters
10+ years modelling and following the refining industry	Evercore ISI has a long history covering the sector, and we have updated and refreshed the investment framework.	Highly cyclical stocks with a potential thematic overlay benefits from historical context. Sector coverage benefits from seeing a few cycles.
Consensus Challenge	A moving target. 2025 estimates ~12% upside, 2026 ~22% downside at prevailing cracks (earnings).	Revisions matter for these stocks and street can be slow to update for regional dynamic shifts in margins.
Volatility Capture Thesis	We reframe refiners as 'volatility harvesters' vs. passive spread takers.	Contextualizes why Energy investors should remain involved in the sector and refining's place in an Energy / Cyclical portfolios.
We know Chemicals	Coverage of commodity chemicals differentiates both on specific (CPChem @ PSX) but also industry level knowledge.	Chemicals is one of the secular growth elements in hydrocarbon markets (despite near-term oversupply) and highly integrated with refining particularly in Asia.
Valuation Crosswalk	Clear side by side 2025/27 EV/EBITDA, P/E, P/FCF with SOTP checks for each name.	Helps triangulate valuation ranges and stress test scenarios.

Phillips 66 (PSX)**Outperform****\$130/shr PT****Figure 1: Bull / Base / Bear Outlook**

Source: Company Data, Evercore ISI Research

Bull Case - \$160	Base Case - \$130	Bear Case - \$90
13x P/E multiple on \$12/shr EPS	14x P/E multiple on \$9/shr EPS	15x P/E multiple on \$6/shr EPS
Above-cycle environment. Successful operational improvement and above-cycle margins in different segments drive robust cash flow, which support consistent dividend growth and significant repurchases, as well as debt reduction. Maintain capital discipline.	Executing on plan. Companywide results continue to grow on performance improvement initiatives. Maintain capital discipline, steady cash flow, dividend growth and meaningful share buybacks through plan period.	Unconstructive macro environment. Below-cycle refining, chemicals, marketing and renewable diesel results dragged by weak margins. Operational improvement falls short of plan. Dividends can grow with minimum buybacks.

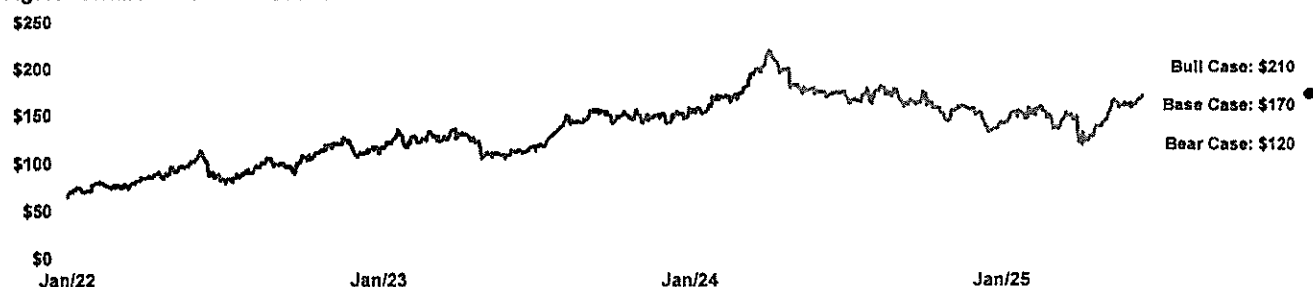
Investment Thesis PSX has worked to improve performance in refining and better define the value proposition for shareholders (well-articulated and more reasonable mid-cycle EBITDA assumptions, clear shareholder returns drivers, balance sheet targets). Our sense is acquisitions in Midstream have surprised to the upside both in terms of absolute size and number, worrying the market that more capital deployed was needed here to realize the full value of the network and the integrated strategy. Post a recent proxy contest, all indications suggest the debate over the integrated model and future design of the portfolio continues. Additional strategic clarity and execution (particularly in refining) should help narrow the valuation gap vs. peers.

Key Drivers

- **Improve refining performance.** PSX seeks long term competitiveness through 1) maintaining operating excellence, 2) increasing asset availability, 3) enhancing market capture, 4) reducing operating cost and 5) managing the portfolio.
- **Capture value from wellhead to market in Midstream.** PSX will continue to strengthen and expand service offerings in NGL, thus Midstream earnings should continue to grow at single digit.
- **Advantaged Chemicals portfolio at the low-end of the cost curve.** PSX's Chemicals income is expected to bottom in 2025 and then improve in 2026-2027, driven by capacity growth and margin recovery. Our estimates reflect margins remain at cycle low during the next 3 years (consistent with our commodity chemical coverage elsewhere).
- **Strong and resilient returns on Marketing & Specialties.** PSX generates double-digit ROCE from M&S with minimum capex needed.
- **PSX operates a portfolio of quality assets.** Earnings potential is substantial with operational improvement.

Risks

- Should oil market become oversupplied due to sluggish economic growth, accelerated growth in non-OPEC+ supply or changes in OPEC+, it could lead to price volatility, poor returns, and rising cost of capital.
- Rising natural gas prices on a BTU equivalent basis, especially more than crude oil and NGLs, may lift cost and hurt earnings in both refining and midstream.
- The downcycle in chemicals may persist longer than expected, dragging returns for years to come.
- PSX's divestments may undershoot expectations and lead to a slower path to hitting debt targets.
- Unforeseen acquisitions may further shake market confidence in the outlook.
- The tariff conflict between the US and China may impact LPG and NGL exports.

Marathon Petroleum (MPC)**In Line****\$170/shr PT****Figure 2: Bull / Base / Bear Outlook**

Source: Company Data, Evercore ISI Research

Bull Case - \$210	Base Case - \$170	Bear Case - \$120
13x P/E multiple on \$16/shr EPS	14x P/E multiple on \$12/shr EPS	15x P/E multiple on \$8/shr EPS
Above-cycle environment. Sustained elevated cash flow support increased dividend growth and significant repurchases, as well as debt reduction. Accelerate investment in NGLs value chain in Midstream following wellhead to water strategy.	Executing on plan. Maintain capital discipline, steady cash flow, dividend growth and meaningful share buybacks through plan period. Midstream EBITDA grows at mid-single-digit annually via paced investment in NGLs value chain.	Unconstructive macro environment. Weaker refining environment erodes cash flow, earnings, balance sheet strength and shareholder returns. Dividends can grow with buybacks lower than expected. Midstream growth slows down.

Investment Thesis

MPC has outpaced peers over the past 5 years driven by a unique downstream / midstream asset configuration (via MPLX), solid execution through the post-COVID period of turnarounds and other market disruptions (delivering refining margins to the bottom line) and a well-timed (and priced) exit of the retail business which served to bolster shareholder returns. On a forward basis we see a sustainable and well risked outlook towards high single digit shareholder returns and growth. We see a 'last man standing' dynamic in California offering an outsized return opportunity for MPC (despite regulatory risks) and upside to 2H estimates from the Mid-Continent. Our investment view is colored by recent performance vs. the sector likely reflecting optimism surrounding California, and the tailwind afforded the re-rating at MPLX over the past 2-3 years.

Key Drivers

- MPC will maintain capital discipline through the cycle. We expect capital spending to approximate \$1.25 Bn on a standalone basis for many years to come. In addition to these multi-year investments at its Los Angeles, Galveston Bay and Robinson refineries, the company is executing shorter-term projects that offer high returns through margin enhancement and cost reduction.
- MPLX continues to execute attractive growth opportunities focused on bringing in incremental third-party cash flows. MPLX continues to grow natural gas and NGL value chains, supporting EBITDA growth at 6-7% annually in 2025-2027.
- Given MPC's highly advantaged refining business and the \$2.5 Bn annualized distribution from MPLX, we expect MPC's capital returns will stay attractive through all parts of the cycle.

Risks

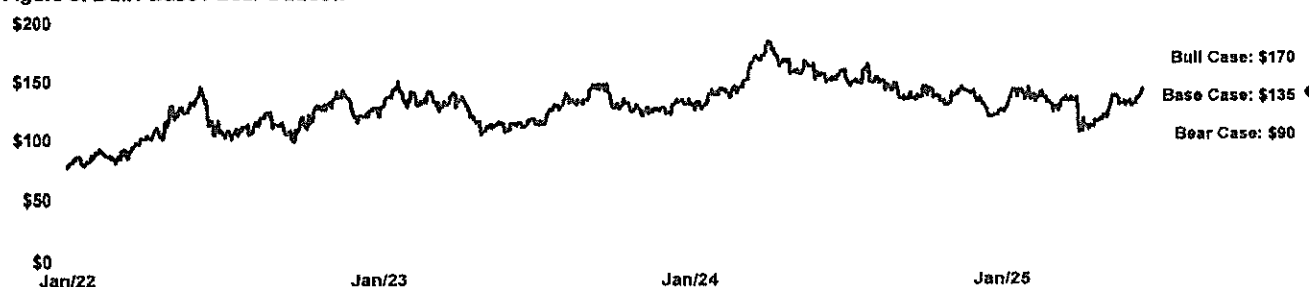
- Should oil market become oversupplied due to sluggish economic growth, accelerated growth in non-OPEC+ supply or changes in OPEC+, it could lead to price volatility, poor returns, and rising cost of capital.
- Near 12% of MPC's refining capacity is in California, which may be impacted by the possible capped margin in California. In addition, renewable diesel expansions may displace petroleum diesel demand in the West Coast over time, squeezing refining margins and portending refinery closures.
- Rising natural gas prices on a BTU equivalent basis, especially more than crude oil and NGLs, may lift cost and hurt earnings in both refining and midstream.
- Renewable diesel results depend on regulations from federal and California governments. Uncertainty stems from volatility in RIN, LCFS, and PTC pricing, which significantly influences margin visibility and investment decisions.

Valero (VLO)

In Line

\$135/shr PT

Figure 3: Bull / Base / Bear Outlook



Source: Company Data, Evercore ISI Research

Bull Case - \$170	Base Case - \$135	Bear Case - \$90
13x P/E multiple on \$13/shr EPS	14x P/E multiple on \$9.5/shr EPS	15x P/E multiple on \$6/shr EPS
Above-cycle environment. Sustained elevated cash flow support increased dividend growth and significant repurchases, as well as debt reduction. Renewable diesel and ethanol operating income gradually improve.	Executing on plan. Maintain capital discipline, steady cash flow, dividend growth and meaningful share buybacks through plan period. Renewable diesel and ethanol operating income gradually improve.	Unconstructive macro environment. Weaker refining environment erodes cash flow, earnings, balance sheet strength and shareholder returns. Dividends can grow with buybacks lower than expected. Renewable diesel and ethanol results drag.

Investment Thesis

We see fears around falling petroleum product demand particularly in the OECD as overblown and expect a longer duration demand horizon for transportation fuels than regulatory frameworks, electrification efforts, or net zero ambitions suggest. Further we see supply side rationalization of marginal refining assets continuing particularly in the OECD. This should leave VLO with both advantaged assets (feedstock and market access) but also advantaged cost (regulatory burden, utilities) vs. peers. We have a lot of respect for the track record of delivery and strategic positioning at VLO, and while there are some potential positives on the horizon (widening light/heavy, return of Russian barrel to the Atlantic basin) the stock has outperformed as refining margins and expectations bottomed in early 2Q. A better entry point is likely as expectations shift and VLOs long term positioning and value proposition remain unchanged.

Key Drivers

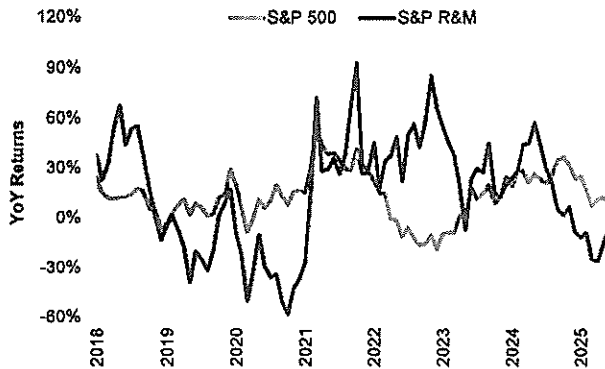
- As a cost leader among peers, VLO is well positioned to weather margin volatility through cycle. VLO has the lowest cash operating cost among the peer group while maintaining top quartile operating performance.
- DGD is competitive due to its access to advantaged feedstocks (waste oils). Port Arthur SAF project provides the plant the optionality to upgrade ~50% renewable diesel to SAF.
- VLO continues to pursue short-cycle, high-return optimization projects around its existing Refining assets.
- Disciplined capital allocation delivering peer leading free cash flow yield and returns to stockholders across margin cycles.

Risks

- Should oil market become oversupplied due to sluggish economic growth, accelerated growth in non-OPEC+ supply or changes in OPEC+, it could lead to price volatility, poor returns, and rising cost of capital.
- Rising natural gas prices, especially more than crude oil, may lift cost and hurt earnings in refining.
- Cost escalation and global inflation pressures could negatively affect earnings and cash flows, eroding shareholder returns.
- Renewable diesel results depend on regulations from federal and California governments. Uncertainty stems from volatility in RIN, LCFS, and PTC pricing, which significantly influences margin visibility and investment decisions.

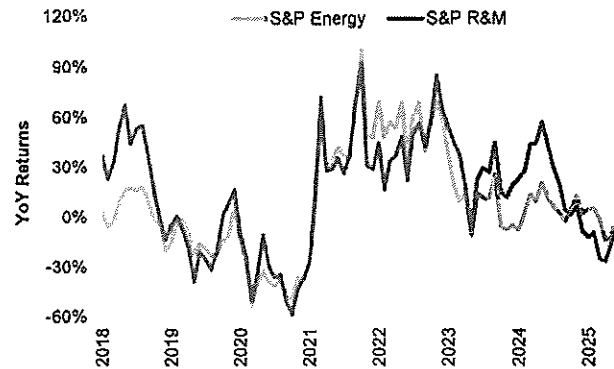
The Refining Cycle in Market Context

Figure 4: Refining is Idiosyncratic to the broader market



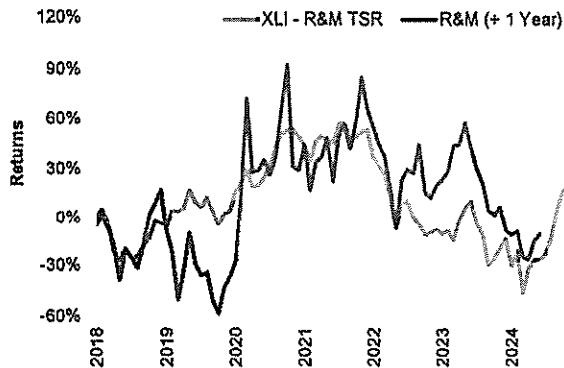
Source: FactSet, Evercore ISI Research

Figure 5: Tighter correlations with S&P500 Energy since 2019



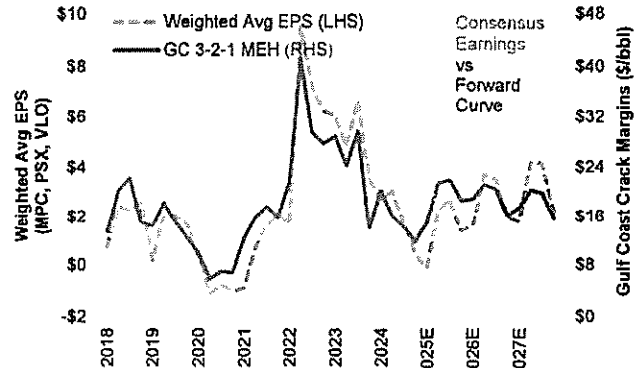
Source: FactSet, Evercore ISI Research

Figure 6: Industrials have proven a good leading indicator



Source: FactSet, Evercore ISI Research

Figure 7: Margins & Earnings off the Late-24 Lows



GC 3-2-1 MEH = Gulf Coast 3-2-1 using Magellan East Houston
Source: FactSet, Bloomberg, Evercore ISI Research

Refining's role in the energy system is clear as the conduit by which crude oil becomes petroleum products that are then distributed and marketed to consumers. The economic rent can shift from the upstream to midstream to downstream in oil markets based on segment supply / demand dynamics and regional infrastructure and regulation. The domestic industry has enjoyed multiple 'Golden Ages' of above midcycle margins due to market disruptions (most recently Russia/Ukraine) and infrastructure / regulatory constraints (think US crude export ban, US oil supply growth, renewable fuel standards, IMO2020). While the economic rent can be expected to shift across segments, advantaged refining assets with access to crude supply, in proximity to markets, with existing infrastructure (pipelines, storage, transportation) have shown earnings and returns durability.

While the broader energy landscape is dependent on economic growth (GDP, PMIs) likewise refined product demand underpins margins which are the leading indicator for earnings and return revisions which in turn drive the stocks. There are similarities between refining and other repeatable revenue, spread driven businesses such as chemicals and parts of industrials.

Refining Margin Outlook

Figure 8: Evercore ISI refining margin outlook (\$/barrel)

		2023	2024	2025E	2026E	2027E	Mid-Cycle	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25E	3Q25E	4Q25E
GC 3-2-1 MEH	North America	24.20	15.43	17.45	15.00	16.00	16.00	20.11	16.08	14.01	11.52	14.82	20.00	20.00	15.00
MW 3-2-1 WTI		29.55	16.70	20.84	17.00	18.00	18.00	17.20	18.30	18.86	12.44	16.37	25.00	25.00	17.00
WC 3-2-1 ANS		38.41	22.66	26.28	22.50	26.00	26.00	28.31	25.11	17.51	19.72	25.13	28.00	28.00	24.00
Europe 3-2-1 Brent	Europe	20.84	14.88	13.82	13.50	15.00	15.00	18.33	18.97	12.27	9.94	11.27	15.00	16.00	13.00
Asia 3-2-1 Dubai	Asia	15.37	10.77	11.80	11.50	13.00	13.00	15.35	9.75	8.77	9.21	9.69	12.50	14.00	11.00
Brent-WTI	Brent-WTI	4.94	4.95	3.52	3.25	4.00	4.00	5.97	4.41	5.00	4.40	4.09	3.50	3.50	3.00
WTI-WCS	WTI-WCS	18.22	14.79	11.95	14.25	15.00	15.00	17.22	13.60	15.38	12.97	13.29	10.50	12.00	12.00
Brent	Brent	82.40	80.76	80.15	70.00	70.00	75.00	83.14	84.91	80.26	74.73	75.61	60.00	55.00	50.00

GC 3-2-1 MEH = Gulf Coast 3-2-1 using Magellan East Houston; MC 3-2-1 WTI = Mid-Continent 3-2-1 using WTI; WC 3-2-1 ANS = West Coast 3-2-1 using Alaska North Slope; EU 3-2-1 Brent = Northwest Europe 3-2-1 using Brent; Asia 3-2-1 Dubai = Singapore 3-2-1 using Dubai

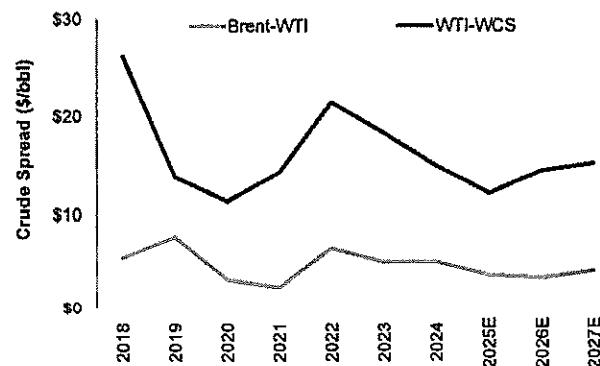
Source: Bloomberg, Evercore ISI Research

Figure 9: Global refining margins staging a recovery in 2025



Source: Bloomberg, Evercore ISI Research

Figure 10: Crude differentials have narrowed with lower oil price, a headwind for domestic margins



Source: Bloomberg, Evercore ISI Research

On a 3-year view, we see the global refined product market finding balance. We assume annual supply adds (380 MBPD) overshoot demand growth (190 MBPD) over the forecast period. While refining shutdowns have been highly visible (4.8 MMBPD of lost capacity since 2020) new projects have proven challenging to ramp and consistently missed project timelines. For 2025, we project healthy gasoline and distillate demand – as retail prices for both products have fallen to multi-year lows – despite macroeconomic uncertainties. The depreciation of the US dollar has further reduced fuel costs for importing countries, providing an additional tailwind for consumption.

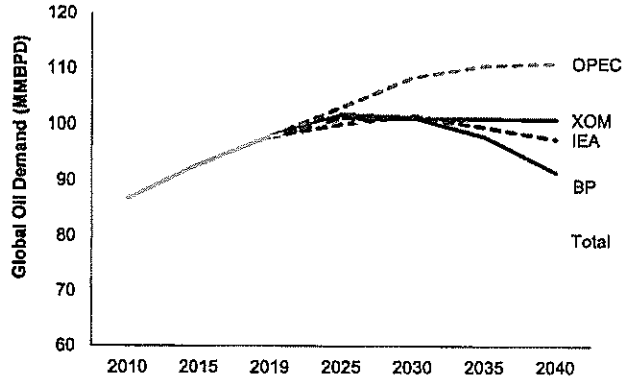
The market has been fearful petroleum product demand was peaking. While there is evidence of demand displacement in some markets (from efficiency gains and EV penetration for transportation fuels) we expect underlying product demand to remain resilient through a period of 2-3% global GDP growth. Resilient product demand in the context of plentiful crude supply growth (globally) provides a backdrop supportive for cost advantaged refining asset values.

Our estimates reflect ~\$16.15/bbl average refining margins on the Gulf Coast (2025-2027), \$1.35/bbl (9%) higher than the average of ~\$14.80/bbl during 2011-2024 post shale boom. Asian refining margins are projected at ~\$12.10/bbl, trailing other regions reflecting new capacity adds. European refining margins are projected at \$14.10/bbl, \$2.10/bbl higher than the average of 2011-2024 reflecting retirements in the context of still lackluster economic growth prospects.

US refiners are expected to remain globally advantaged based on access to cheap feedstocks, resilient domestic demand, export market opportunities in the Western Hemisphere, and higher utilization rates. Most North American crude spreads are expected to remain at discounts vs international seaborne crude, though the gap of Brent-WTI is expected to be narrower as the US supply growth is approaching a near-term peak due to lower crude price and resource constraints. We expect heavy spreads (WTI-WCS) to widen considering: 1) return of incremental Arab heavy barrels from OPEC and continued growth from Canada, and 2) limited additional Canadian egress as infrastructure reaches capacity.

Will the Energy Transition Strand US Refining Assets?

Figure 11: Is global oil demand peaking near 2030?

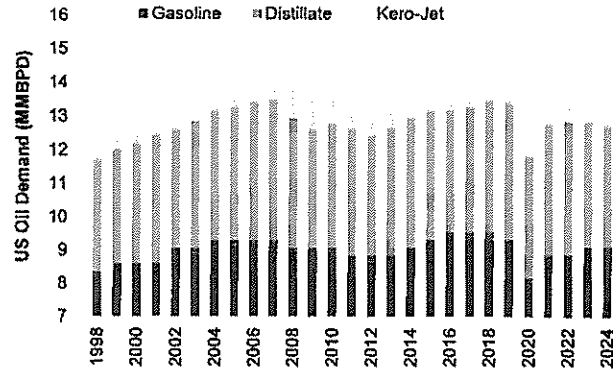


Excluding biofuels.

IEA case refers to IEA – Stated Policies; BP case refers to BP – Current Trajectory; Total refers to Total – Momentum scenario.

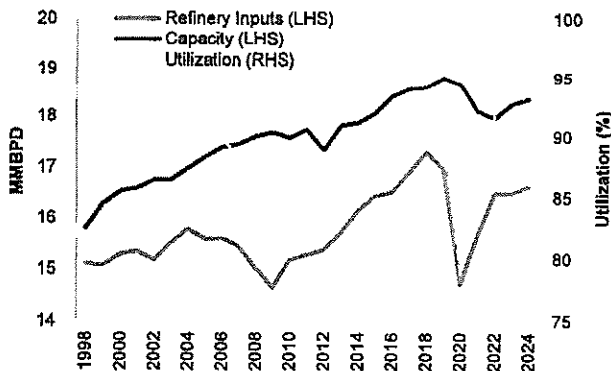
Source: IEA, OPEC, XOM, BP, Total, Evercore ISI Research

Figure 12: US oil demand has peaked in our view. A gradual minimal decline is possible due to efficiency gains, EV transition, and biofuels



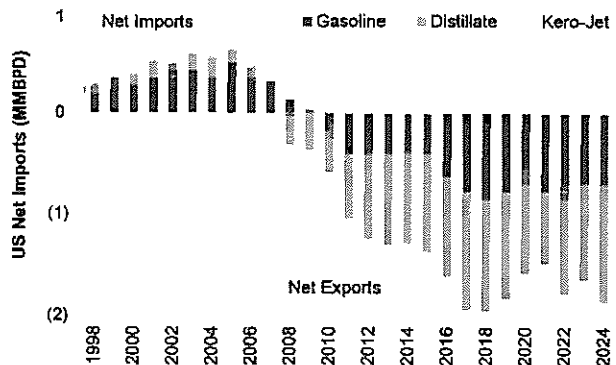
Source: EIA, Evercore ISI Research

Figure 13: US refinery capacity and inputs have also peaked



Source: EIA, Evercore ISI Research

Figure 14: US light products exports to support domestic refinery runs



Source: EIA, Evercore ISI Research

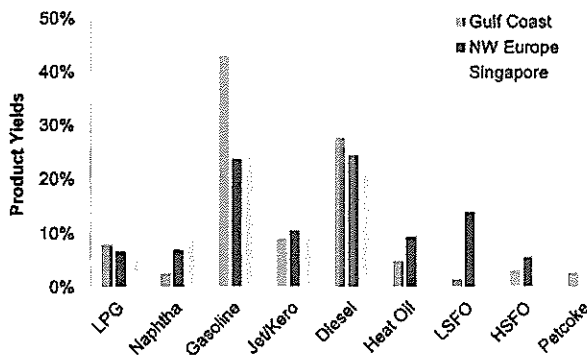
Global light product demand is expected to keep growing but at a slower pace over the next few years in our analysis. Higher fuel economy and emissions standards remain significant threats to oil demand over the near to medium term with developed world governments and industry coalescing around end decade (or mid-2030s) phase out of ICE vehicles. Government mandates to boost biofuel use will continue to displace light petroleum product demand, a dynamic seen acutely in certain regions (notably California).

We don't see risks to US refinery utilization rates well into the 2030s from moves away from petroleum products. In the interim, the domestic refining industry should be expected to maintain high utilization rates to fulfill resilient domestic demand and export market opportunities (Mexico and Latin America). We see the threats of lower utilization rates manifesting in the post 2030 period. Integrated refineries and petrochemical complexes are likely to remain competitive to reflect shifts in the downstream: more petrochemical demand with less motor gasoline and diesel demand over time.

In the US, West Coast refineries are least competitive due to high operating costs and dwindling regional crude supply. Regulatory rule changes and a potential windfall profit tax have made operating in the regional less attractive. The region is expected to lose almost 500 MBPD of capacity due to biofuel conversion at MPC's Martinez and PSX's Rodeo and the permanent closure of PSX's LA and VLO's Benicia refineries all by 2026.

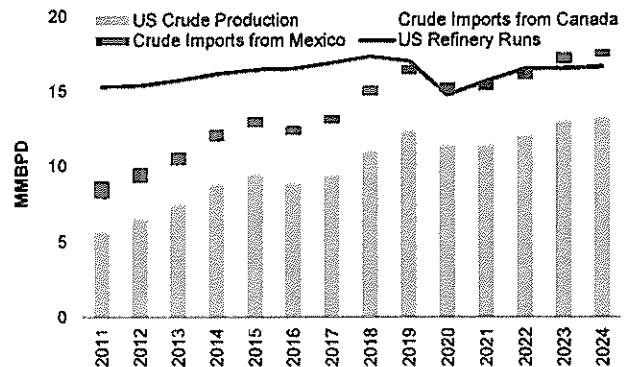
US Refining Well-Positioned Globally

Figure 15: US refiners enjoy higher yields on light products



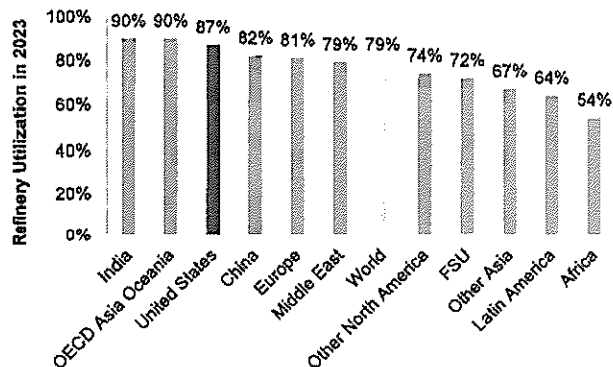
Source: IEA, Evercore ISI Research

Figure 16: US refiners enjoy access to cheap crude feedstocks



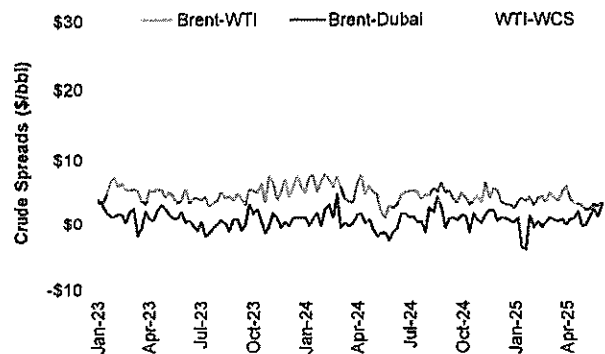
Source: EIA, Evercore ISI Research

Figure 17: Industry leading utilization rates drive lower unit costs



Source: IEA, Evercore ISI Research

Figure 18: North American crudes trade at discounts



Source: Bloomberg, Evercore ISI Research

Light refined products (gasoline, diesel, kerosene, jet fuel) drive profitability in refining. The Gulf Coast refineries' light product yields are near 80%, while European and Asian refinery yields are close to 60%. As a result, US refinery capture rate is higher than international peers, meaning realized refining margins are often 80%+ of benchmark margins in the US.

Refinery profitability can differ upon access to specific feedstocks that often trade at regional discounts because of either quality or transportation constraints. We assume a midcycle Brent-WTI spread of \$4/bbl, reflecting shipping costs and other factors of moving crude oil, produced in landlocked areas, to the coast for export.

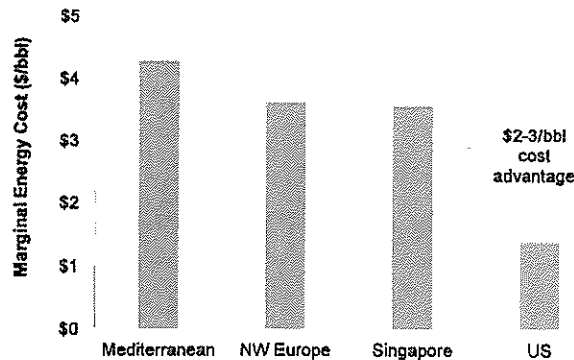
The expansion of the Transmountain Pipeline (TMX, providing egress of Canadian crude to the west coast) added an additional 590 MBPD capacity, bringing the total to 890 MBPD. The pipeline is running close to capacity. Two thirds of incremental TMX barrels are destined to Asia and one third towards the US West Coast, benefiting West Coast refineries. WCS differentials are expected to widen in our view considering rising Canadian oil supply with limited additional pipeline takeaway capacity. Trends in Venezuela and Mexico also bear watching for light / heavy spreads.

Brent-Dubai spreads are expected to widen when OPEC raises output because heavier, high sulfur supply rises starting in 2Q25. This may be partially offset by losses in heavy grades from Venezuela.

Capital and operating costs are higher on complex refineries, often offsetting some of the economic benefits from feedstock flexibility.

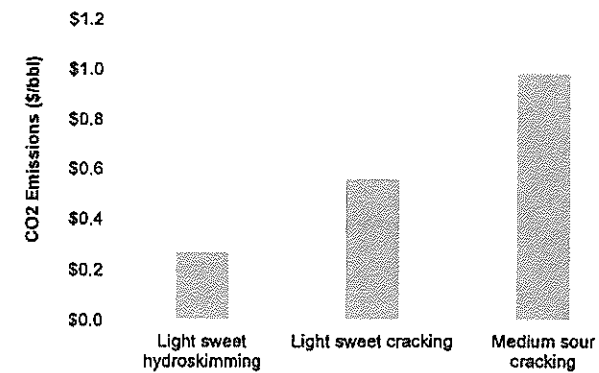
US Refining's Cost Advantage

Figure 19: US refiners enjoy a tailwind from energy costs



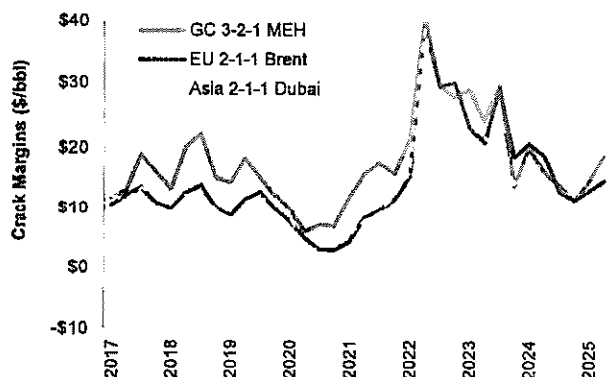
Source: IEA, Evercore ISI Research

Figure 20: Carbon costs = additional cost burden on EU refiners



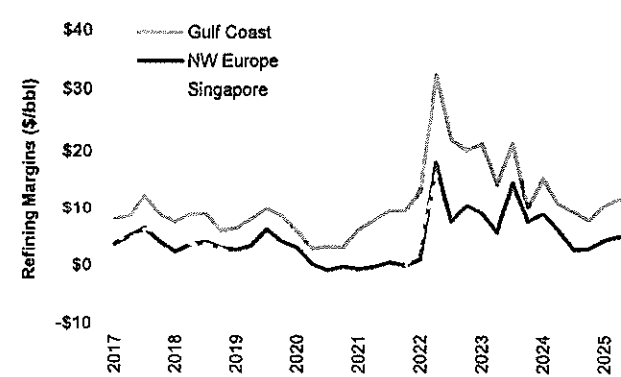
Source: IEA, Evercore ISI Research

Figure 21: Regional margins are connected by global fundamentals with NAM margins leading Asia and Europe



Crack margins are benchmark margins. GC 3-2-1 MEH = Gulf Coast 3-2-1 using Magellan East Houston; EU 2-1-1 Brent = Northwest Europe 2-1-1 using Brent; Asia 2-1-1 Dubai = Singapore 2-1-1 using Dubai
Source: Bloomberg, Evercore ISI Research

Figure 22: US refiners cost advantages = higher margins



Refining margin is calculated as refined product yields * price - crude feedstocks * price - marginal energy cost - CO2 emission cost - freight cost
Source: IEA, Evercore ISI Research

In the US, refinery utilization has typically been near 90%. Global refinery utilization was close to 79% (82 MMBPD throughput out of 104 MMBPD capacity), much lower than the US. Higher refinery utilization can decrease fixed cost, improving profitability.

Many US refiners benefit from advantaged energy costs. Energy consumption in refining includes natural gas, fuel gas, ethane, LPG, fuel oil, electricity, petroleum coke and imported steam. Energy related cost can save \$2-3/bbl for a US refinery vs one in Europe and Asia. This is significant as the average publicly disclosed unit operating costs (refining is a high fixed cost business) for larger US operators is around \$5/bbl.

CO2 emissions from hydrogen production and refinery energy consumption can cost \$0.2-1/bbl (assuming 50% free allowance) depending on refinery processes. Fit for 55 (EU's target of reducing net greenhouse gas emissions by at least 55% by 2030) may further pressure EU refineries' competitiveness sagged by rising CO2 prices and less free allowance.

Figure 22 illustrates the profitability erosion of international refineries over the last several years vs the US units, though benchmark crack margins remain connected and synchronized (Figure 21). The above factors contributed to the widening profitability spread in our view.

Global Capacity Adds Slowing

Figure 23: A shorter list of capacity additions (China excluded)

Country	Projects	MBPD Capacity	Year
Nigeria	Lekki	650	2024
Iraq	Baiji	150	2024
Indonesia	Balikpapan Upgrade	100	2024
Mexico	Dos Bocas	340	2025
India	Barmer	180	2025
Iran	Persian Gulf Star & Sraf	120	2026
Bahrain	Sitra	110	2026
Egypt	Aln Al Sokhna Refinery	200	2026
Nigeria	Port Harcourt Restart	150	2026
India	Numaligarh, Assam	120	2026
India	Nagapattinam	180	2027
India	Panipat	200	2027
		2,500	

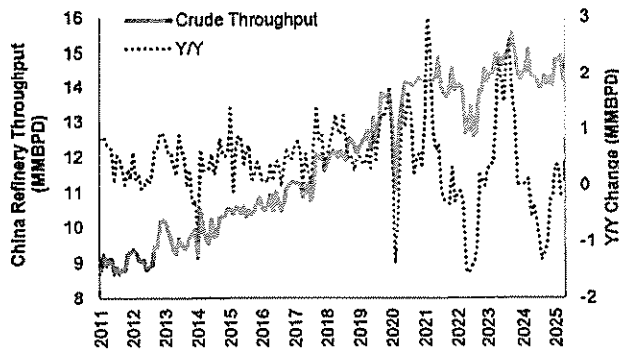
Capacity is CDU Capacity
Source: IEA, Kpler, Evercore ISI Research

Figure 24: Closures primarily in OECD countries

Country	Projects	MBPD Capacity	Year
Italy	Livorno	-120	2024
United States	Rodeo	-120	2024
Japan	Yamaguchi	-120	2024
United States	Houston Lyondell	-260	2025
Germany	Gelsenkirchen	-80	2025
Germany	Rheinland	-150	2025
United Kingdom	Grangemouth	-130	2025
United States	Wilmington	-140	2025
United States	Benicia	-150	2026
		-1,270	

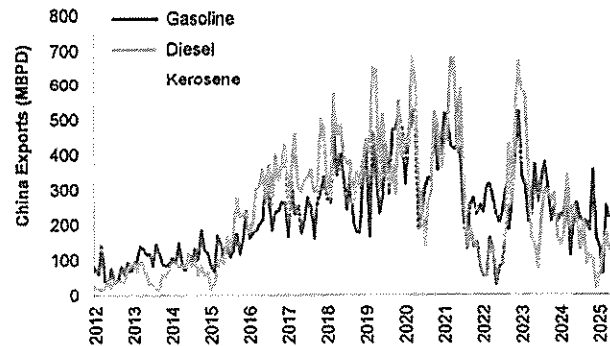
Wilmington is P66's LA refinery; Capacity is CDU Capacity
Source: IEA, Kpler, Evercore ISI Research

Figure 25: Headwind to China crude throughput due to trade war



Source: Bloomberg, IEA, Jodi, Evercore ISI Research

Figure 26: China product exports have likewise been constrained by quotas, tariffs and economics, and may decline further in 2025 due to VAT rebate reduction from 13% to 9% (likely \$3/bbl negative impact on profits). Jet fuel export remains resilient as jet fuel were mostly exported via processing trade route, which remains tax free



Source: IEA, Bloomberg, Evercore ISI Research

Global capacity growth is restrained due to limited greenfield refinery completions and refinery expansions along with continued closures. Twelve major projects will add 2,500 MBPD capacities, partially offset by 1,270 MBPD loss from nine announced closures in 2024-2027.

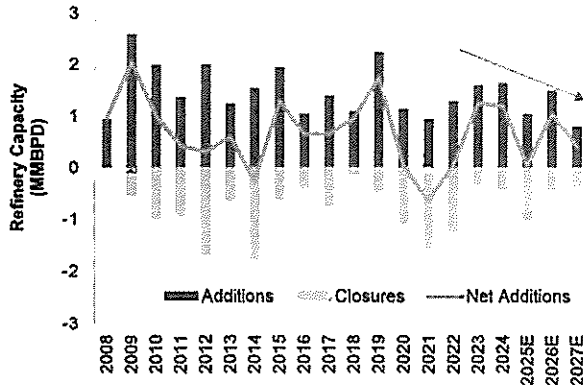
China's refinery capacity approached 955 MM metric tons (19.2 MMBPD) in 2024 with refinery utilization near 75%. Refinery capacity is expected to expand to 980 MM metric tons (19.7 MMBPD) in 2028, before declining to 960 MM metric tons (19.3 MMBPD) by 2030.

Several refinery projects come online in China, such as Yulong (430 MBPD in 3Q24), Zhenhai expansion (260 in 4Q24), and Panjin (320 in 2026), but the pace is slowing vs last decade. Also new capacity growth is accompanied with announced closures. To maintain Shandong's competitiveness in the refining and petrochemical sector, the provincial government initiated the Yulong project in 2018 by consolidating 10 small independent refineries, phasing out their combined 558 MBPD of capacity and taking over their 13 million mt/year of crude import quotas. As a result, net capacity addition from China is limited to 100 MBPD per year in 2025-2027 in our view.

According to Figure 28, total growth in "light-products" capacity approximates ~380 MBPD on average, which is above Evercore ISI projections for petroleum refined products (gasoline, diesel, jet fuel) demand growth of ~190 MBPD per annum during 2025-2027.

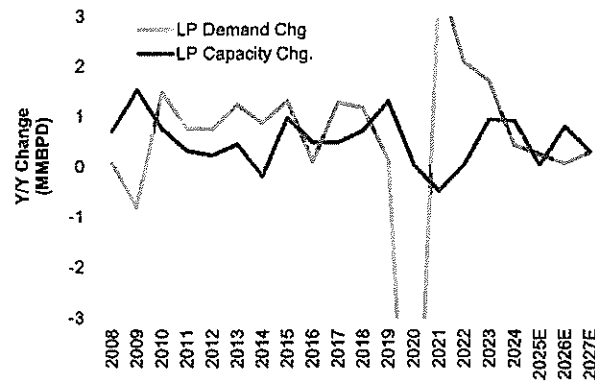
Global Balances Support Healthy Margins

Figure 27: Less refinery capacity expansion during 2025-2027



Source: IEA, Kpler, Evercore ISI Research

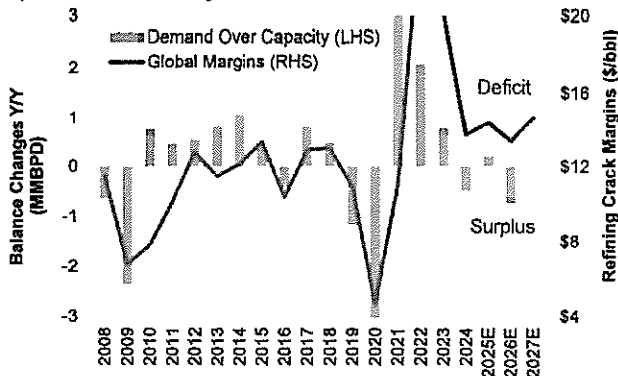
Figure 28: Limited light product supply growth meet with slower demand growth in 2025-2027



Light product capacity change is calculated as (refinery additions – closures)*75%. Light products demand refers to gasoline, gasoil/diesel, jet/kerosene demand excluding biofuels.

Source: IEA, Kpler, Evercore ISI Research

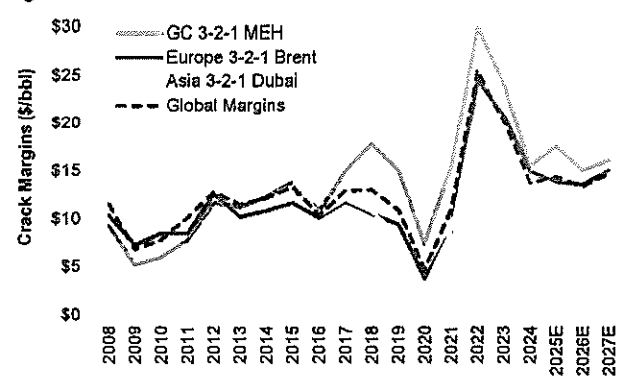
Figure 29: Supported by balances, global refining margins are expected to be healthy in 2025-2027



Product balances are calculated as light products demand change y/y minus capacity change y/y.

Source: IEA, Kpler, Bloomberg, Evercore ISI Research

Figure 30: US refining margins continue dominating other regions



Global margins are the simple average of 3 regions' refining crack margins: North America, Northwest Europe and Singapore.

Source: Bloomberg, Evercore ISI Research

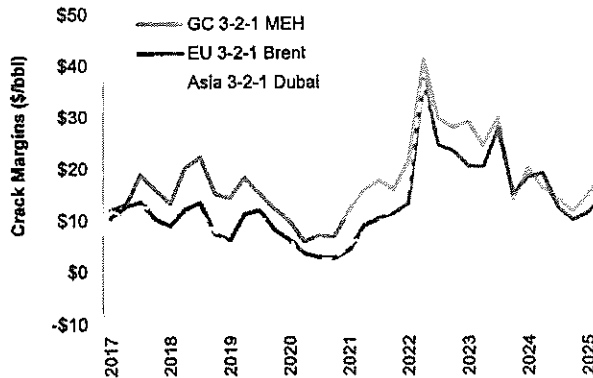
Similar to crude oil, refinery margins are mainly driven by capacity additions, demand growth, as well as inventories in our view. Figure 29 illustrates that the net balance changes (demand over capacity) are well associated with gross margins in recent decades.

We project limited capacity growth during 2025-2027 (Figure 27), which is bullish for refinery margins; however, this will be offset by slower demand growth due to higher fuel economy and emissions standards as well as EV penetration. Downward revision to supply is possible as refinery projects tend to be delayed and ramp-up usually takes longer than expected. Therefore, we expect refining margins to remain attractive in 2025-2027.

Regionally, we project ~\$16.15/bbl refining margins in the Gulf Coast during 2025-2027, which is \$1.35/bbl higher than the average of ~\$14.80/bbl during 2011-2024 post shale boom. Asian refining margins are projected to near \$12.10/bbl, trailing other regions reflecting new capacities online squeezing margins. European refining margins are projected to be \$14.10/bbl, \$2.10/bbl higher than average of 2011-2024. Northwestern European refineries yield less gasoline and diesel high value products, while cost is higher there thus they need higher benchmark margins to breakeven. US refining margins will continue to lead other regions, supported by easy access to cost-advantaged crude, three refinery closures (Houston-Lyondell, Los Angeles-PSX and Benicia-VLO), steady demand, and relatively low product inventories.

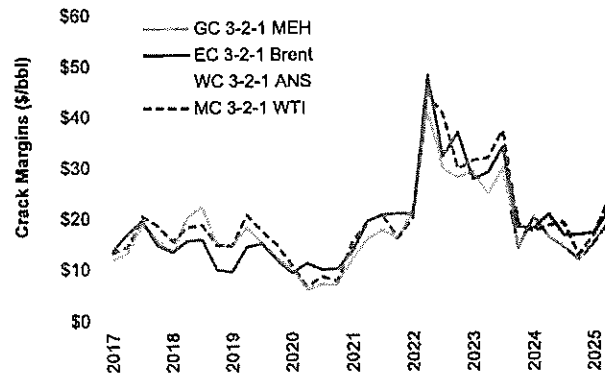
Light Product Inventories Low by Historical Standard

Figure 31: Regional margins are connected by global fundamentals with NAM margins leading Asia and Europe



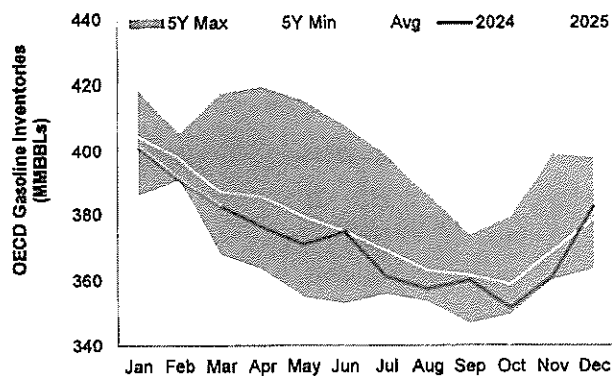
Source: Bloomberg, Evercore ISI Research

Figure 32: West Coast, due to relative geographic isolation, dominates other markets in crack margins



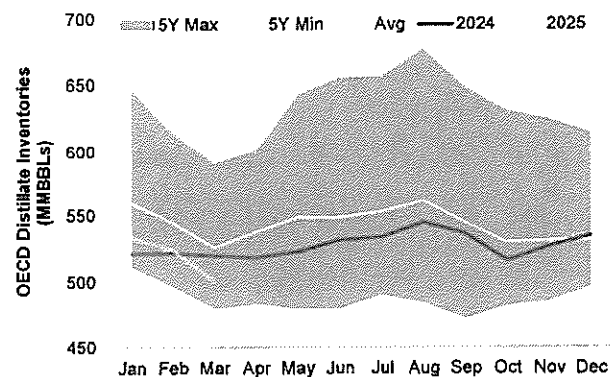
Source: Bloomberg, Evercore ISI Research

Figure 33: OECD gasoline inventories below 5-year average



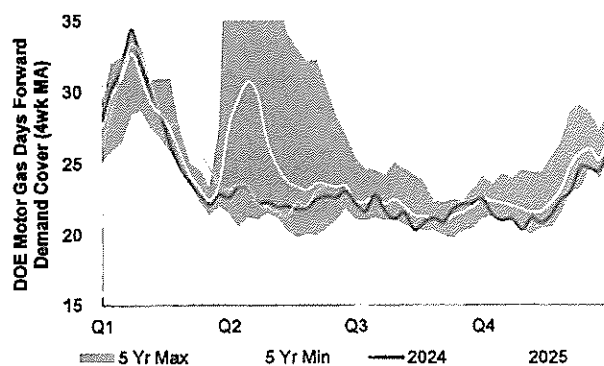
Source: IEA, EIA, OPEC, Evercore ISI Research

Figure 34: OECD distillate inventories below 5-year average



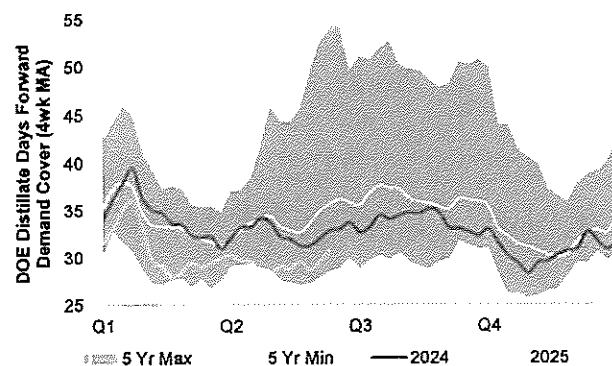
Source: IEA, EIA, OPEC, Evercore ISI Research

Figure 35: US gasoline inventories near 5-year average



Source: IEA, EIA, OPEC, Evercore ISI Research

Figure 36: US distillate inventories below 5-year average



Source: IEA, EIA, OPEC, Evercore ISI Research

Distillate inventories remain low, below 5-year average, and lower year over year. Refining fundamentals remain tightened.

Gasoline Margins and Inventories Correlated

Figure 37: East Coast gasoline inventories are seasonal low, supporting margins

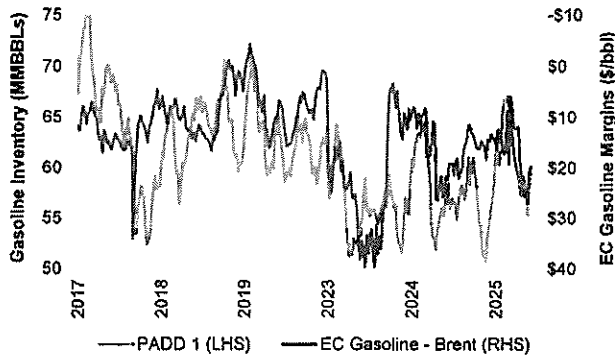


Chart excludes 2020-2022 data

Source: Bloomberg, EIA, Evercore ISI Research

Figure 38: Midcontinent gasoline inventories are seasonal low, supporting margins

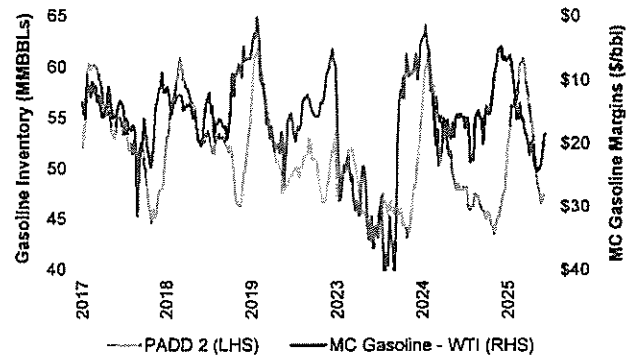


Chart excludes 2020-2022 data

Source: Bloomberg, EIA, Evercore ISI Research

Figure 39: Gulf Coast gasoline inventories are relatively plentiful, but margins are healthy

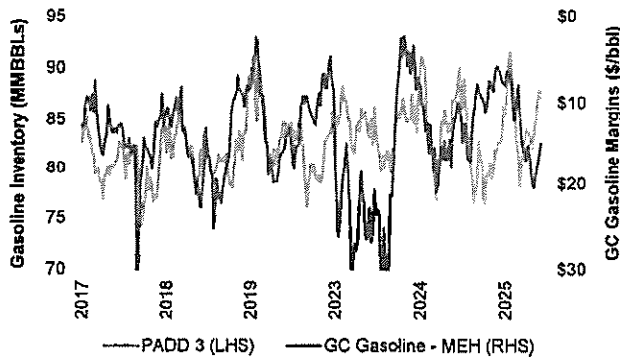


Chart excludes 2020-2022 data

Source: Bloomberg, EIA, Evercore ISI Research

Figure 40: West Coast gasoline inventories are seasonal low, supporting margins

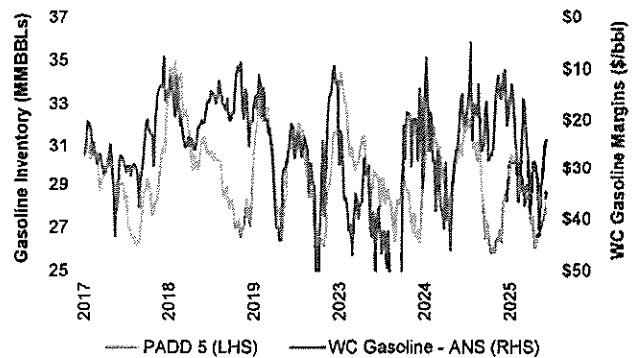


Chart excludes 2020-2022 data

Source: Bloomberg, EIA, Evercore ISI Research

Gasoline inventories in PADD 1, 2 and 5 are seasonal low, supporting gasoline crack margins at the beginning of summer driving season. Gasoline inventories in the Gulf Coast stand higher comparing to other regions, but gasoline crack margins are healthy.

West Coast gasoline margins are more volatile than other regions, impacted by relative low inventory.

Distillate Margins Impacted by Inventories

Figure 41: No clear correlation between East Coast distillate inventories and margins

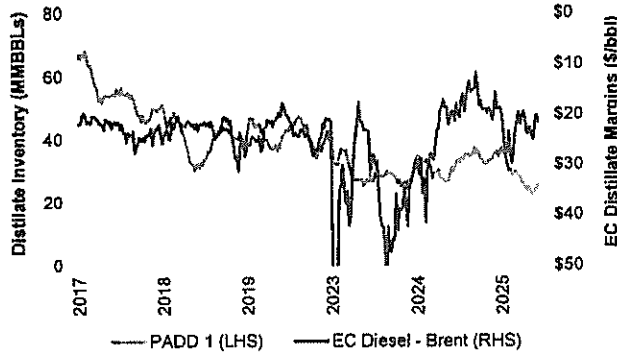


Chart excludes 2020-2022 data

Source: Bloomberg, EIA, Evercore ISI Research

Figure 42: Midcontinent distillate inventories are low, supporting margins

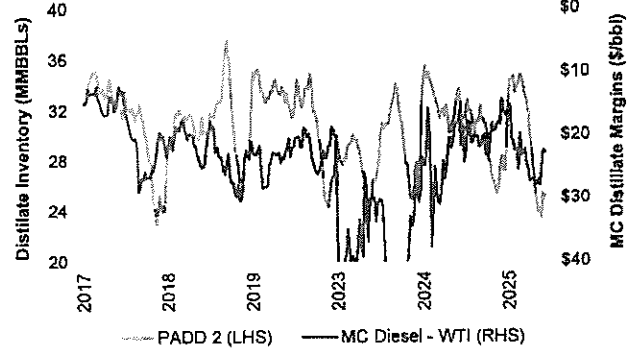


Chart excludes 2020-2022 data

Source: Bloomberg, EIA, Evercore ISI Research

Figure 43: Gulf Coast distillate inventories are relatively plentiful with margins lagging other regions

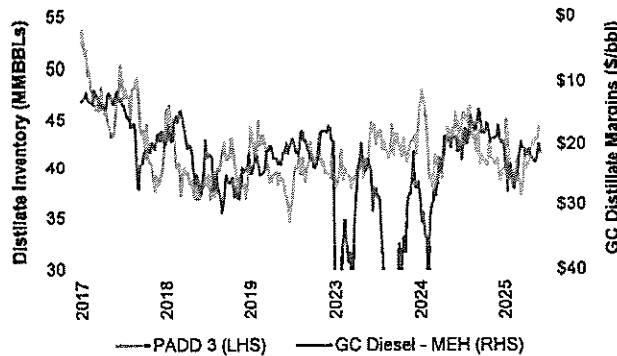


Chart excludes 2020-2022 data

Source: Bloomberg, EIA, Evercore ISI Research

Figure 44: West Coast distillate inventories and margins are disconnected due to rising renewable diesel supply

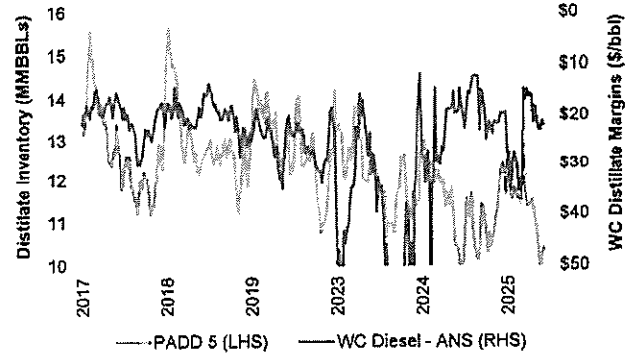


Chart excludes 2020-2022 data

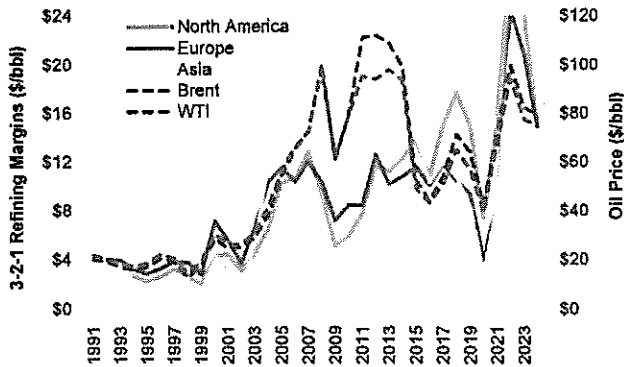
Source: Bloomberg, EIA, Evercore ISI Research

Like gasoline, distillate inventories in PADD 1, 2 and 5 are low, supporting distillate crack margins. Distillate inventories in the Gulf Coast are not comparatively low, but distillate crack margins are healthy.

West Coast distillate inventories and margins are disconnected due to rising renewable diesel supply in recent years.

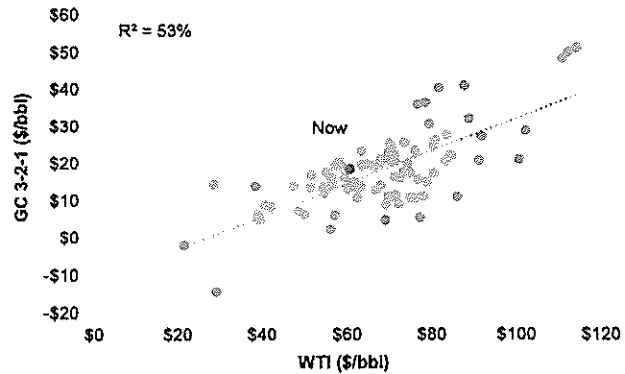
Crude Oil Prices and Refining Margins Connected

Figure 45: Oil prices and refining margins are connected



Source: Bloomberg, Evercore ISI Research

Figure 46: Oil price and Refining Margins, Cause & Effect



Source: Bloomberg, Evercore ISI Research

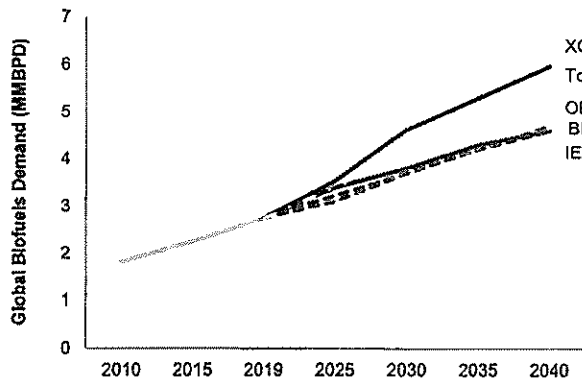
Refining margins are influenced by various factors, including crude oil prices, product demand, and refinery operational costs. For instance, when crude oil prices decline faster than refined product prices, refining margins can widen, making refining more profitable. Conversely, if refined product prices fall or if there's an oversupply, margins can compress, leading refiners to reduce crude intake, which may exert downward pressure on crude prices.

Unexpected events, such as refinery outages or pipeline disruptions, can lead to sudden changes in refining margins. In isolated regions, these disruptions can cause refined product shortages, leading to temporary spikes in product prices and refining margins. Such scenarios can prompt refiners to increase crude purchases to capitalize on higher margins, influencing crude demand and prices.

Understanding the interplay between crude oil and refined products is essential for market participants. While crude oil prices are influenced by various factors, including geopolitical events and OPEC+ decisions, the economics of refining and the demand for end products are fundamental drivers. A comprehensive analysis of the petroleum market should, therefore, encompass both upstream (crude oil) and downstream (refined products) dynamics to accurately assess price movements and market trends.

Biofuels Capacity Expansions Compress Margins

Figure 47: Steady rise in Global biofuels demand

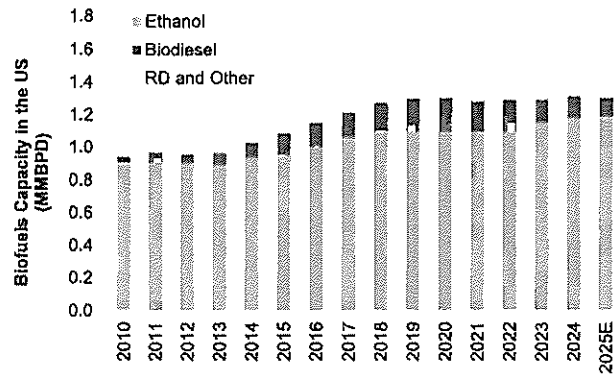


BP case refers to BP – Current Trajectory

Total refers to Total – Momentum scenario.

Source: IEA, OPEC, XOM, BP, Total, Evercore ISI Research

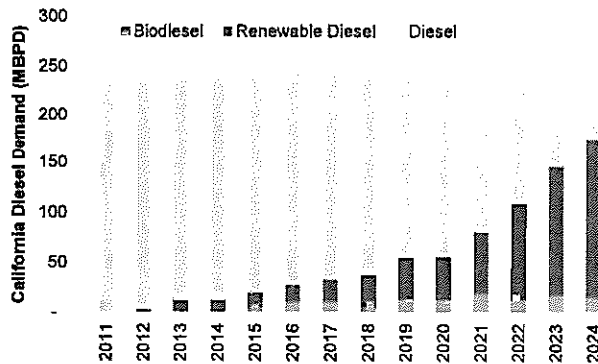
Figure 48: Surging US renewable diesel capacity



RD = renewable diesel

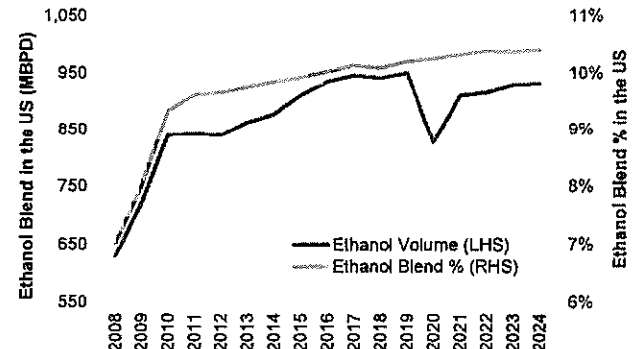
Source: EIA, Company Data, Evercore ISI Research

Figure 49: Renewable diesel and biodiesel accounted for ~75% of California's diesel consumption in 2024



Source: CARB, Evercore ISI Research

Figure 50: Ethanol demand in the US remains constrained



Source: EIA, Evercore ISI Research

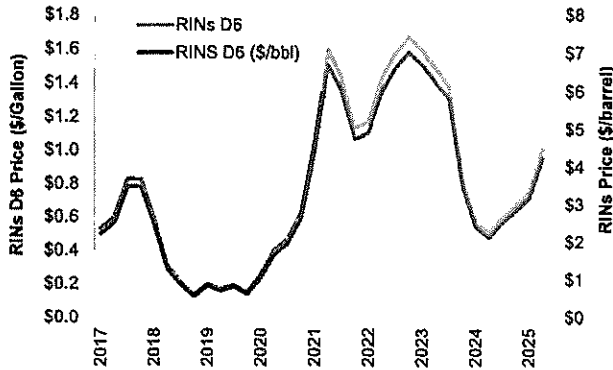
Most renewable diesel in the US has been consumed on the West Coast, where producers can take advantage of both RIN credits from the RFS and state credits, such as the California Low-Carbon Fuel Standard (LCFS), the Oregon Clean Fuels Program, and the Washington State Clean Fuels Program.

Renewable diesel production capacity in the US is on track to reach 315 MBPD in 2025, contributing to a greater share of West Coast diesel consumption. In California, renewable diesel has replaced nearly 160 MBPD of petroleum-based diesel. Consumption of petroleum diesel, on the other hand, dropped to ~60 MBPD by 2024. According to VLO, diesel demand in select markets that have low-carbon mandates in place or in consideration is near 7.2 MMBPD, including Canada, EU, UK, some US states. Figure 47 illustrates major agencies project steady increase in biofuels demand (ethanol, biodiesel and RD) to ~5 MMBPD by 2040 at a growth rate of 80-100 MBPD per year.

Ethanol growth, hampered by the "blending wall", remain constrained, but CCUS could shift carbon intensity impacts and make blending more competitive. The EPA has approved year-round E15 sales in six Midwest states, which may lead to higher blending percentage.

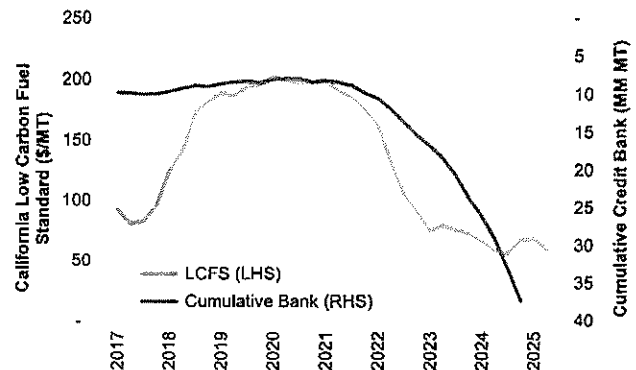
Biofuels Margins Under Pressure

Figure 51: RINs prices recovering from recent lows



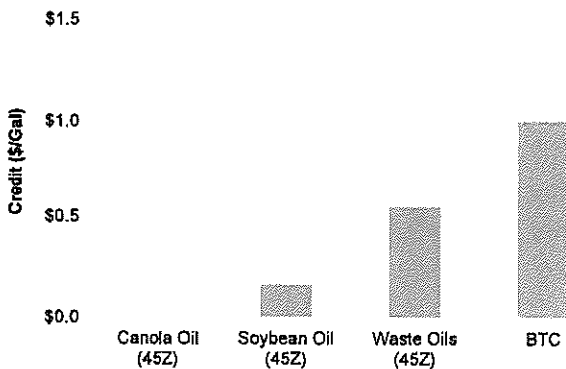
Source: Bloomberg, Evercore ISI Research

Figure 52: California LCFS also improved slightly but credit bank is unprecedentedly high, a bearish outlook for LCFS



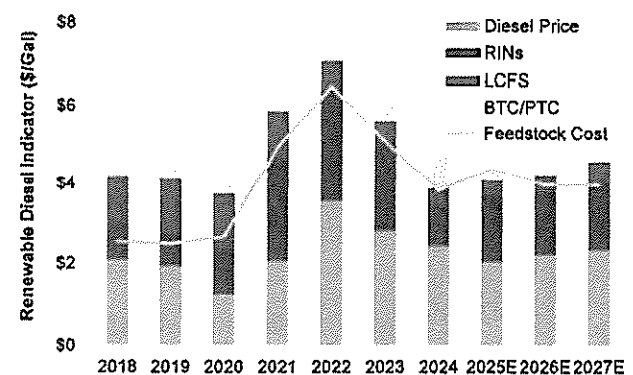
Source: California Air Resources Board, FactSet, Evercore ISI Research
Cumulative Credit Bank shows the net credit balance as of the quarter.

Figure 53: BTC to PTC transition reduced credits



Source: VLO, Evercore ISI Research

Figure 54: Renewable Diesel gross margins under pressure



Source: VLO, Evercore ISI Research

Renewable supply growth in recent years has outpaced mandate growth, leading to sharp decline in RINs and LCFS prices. Credit prices are likely to recover gradually over the next few years in our view however the RD gross margins should remain constrained, not comparable to the higher profitability years 2018-2023 as Figure 54 illustrates.

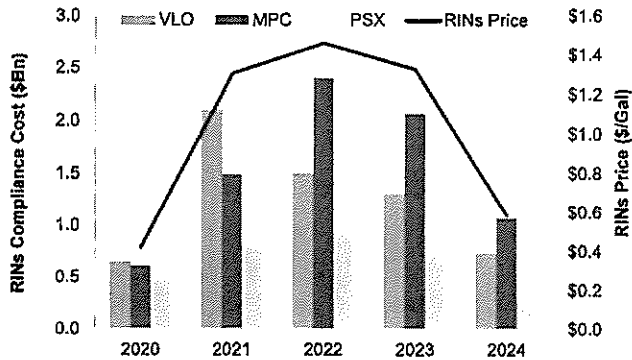
The U.S. EPA proposed to increase the amount of biofuels that oil refiners must blend into the nation's fuel mix in 2026 and 2027, and included a surge in biomass-based diesel mandates. Additionally, the second Trump administration has signaled a potential increase in the approval of Small Refinery Exemptions (SREs). These rules could significantly impact RIN demand and compliance strategies for obligated parties.

The delay in implementing the stricter CI targets has contributed to an oversupply of LCFS credits, exerting downward pressure on credit prices. Subject to The Office of Administrative Law (OAL) approval, California might increase their LCFS obligation by 9% going back to Jan 1 if the amendments are approved by June 30, potential increase for LCFS prices.

BTC to PTC transition starting January 2025 reduces credits for the RD industry. Based on the GREET model run by VLO, the credit drops to zero for canola oil, \$0.16/gal for soybean oil, and \$0.50-0.60/gal for waste oils, vs \$1.00/gal for BTC. Vegetable oils and biodiesel will be marginal post the expiration of blender's tax credit. Importers won't qualify for the production tax credit starting 2025. Foreign UCO will no longer qualify for PTC either. Under the bill titled the "One Big Beautiful Bill" Act, PTC would be extended from the end of 2027 to the end of 2031.

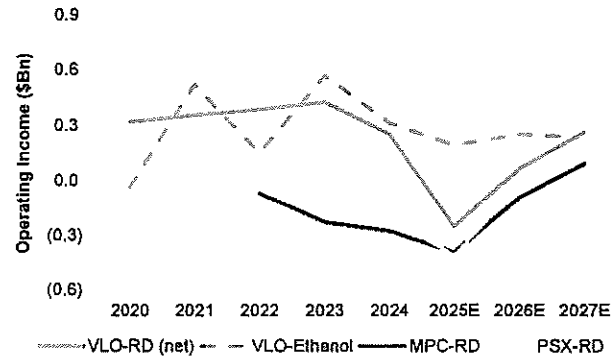
Biofuels Help Offset Regulatory Cost for US Refiners

Figure 55: RINs compliance cost significant for some



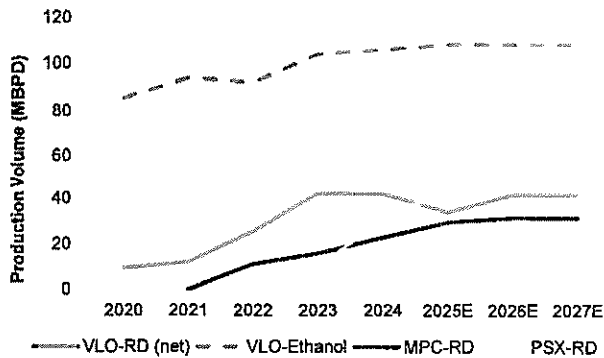
Source: Company Data, Bloomberg, Evercore ISI Research

Figure 56: Renewable diesel's operating income can help offset RINs compliance cost in refining



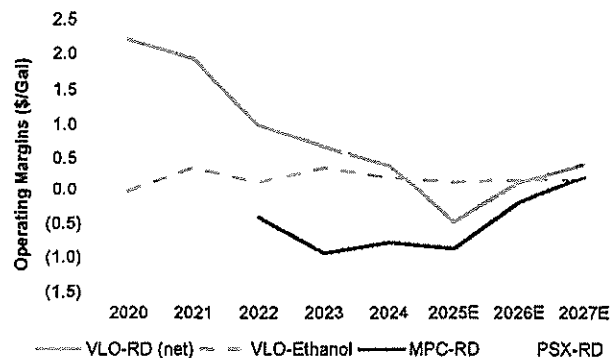
Source: Company Data, Bloomberg, Evercore ISI Research

Figure 57: Biofuels exposure in order of magnitude: VLO > PSX > MPC



Source: Company Data, Evercore ISI Research; Chart reflects MPC's 50% interest in Martinez renewables and VLO's 50% interest in DGD.

Figure 58: Renewable diesel's economic rent deteriorated, and may bottom out in 2025



Source: Company Data, Evercore ISI Research; Chart reflects MPC's 50% interest in Martinez renewables and VLO's 50% interest in DGD.

VLO, MPC and PSX are obligated parties to comply with RVO as a refined products producer, but they also generate RINs from their renewable diesel (RD) and ethanol segments.

The obligation burden on VLO is declining faster than RINs price over 2021-2024, reflecting RD capacity expansions. Diamond Green Diesel (DGD) capacity (100% basis) has been rising from 290 million gallons per year in 2020 to 730 in 2021 to 1,220 in 2022. Assuming \$1/bbl RINs price and 1.7x credit generation, DGD can offset VLO's cost by \$1 Bn a year on 50% basis (JV interest).

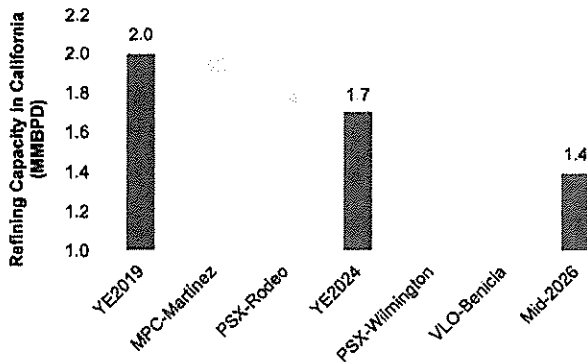
Conversely MPC's RINs compliance cost, accelerated in 2021-2022 due to the Speedway divestment. MPC's RINs costs declined by ~\$1 Bn in 2024 following lower RINs prices, also assisted by the Martinez Renewables (MPC interest-50%) facility, which ramps towards the full capacity of 730 million gallons per year by YE 2024. In addition to Dickson, MPC's renewable fuels' *net* capacity expands to 550 million gallons per year. Assuming \$1/bbl RINs price and 1.7x credit generation, RD can offset MPC's cost by \$0.8 Bn a year.

PSX's compliance cost has been low due to access to marketing volumes. RINs cost have declined to only \$250 MM in 2024 or will revert to RINs revenue driven by Rodeo conversion and closure of LA refinery in our view. The Rodeo Renewable Energy Complex reached full processing rates of ~50 MBPD by the end of 2Q24. Assuming \$1/bbl RINs price and 1.7x credit generation, RD can offset PSX's cost by \$1.1 Bn a year.

Figure 56 and 58 show VLO's ethanol margin retreated on lower ethanol prices challenged with high inventories.

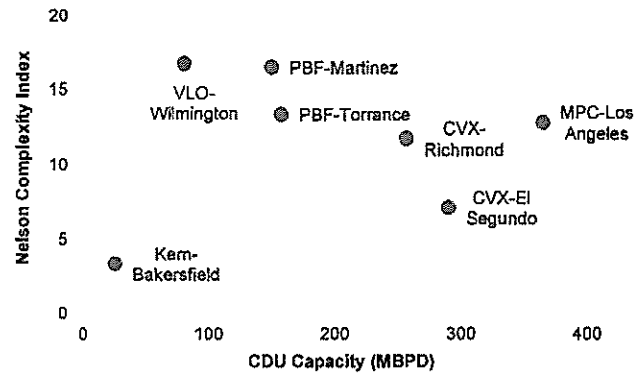
California Refineries at Risk

Figure 59: California refining capacity is shrinking to 1.4 MMBPD by 2026



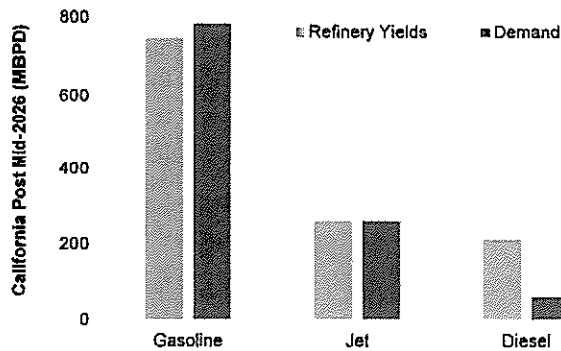
Source: Company Data, EIA, Evercore ISI Research

Figure 60: California refineries expected in operation post 2026



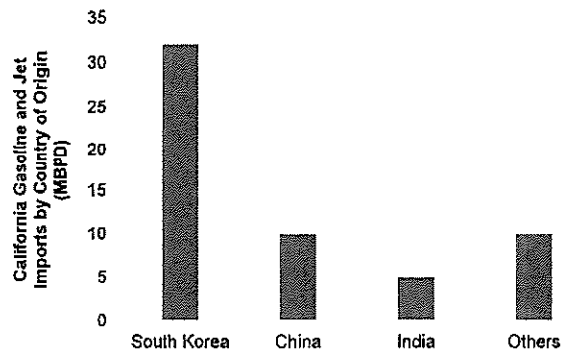
Source: Company Data, EIA, Evercore ISI Research. Note: High complexity index = more competitive.

Figure 61: Gasoline and jet fuel will likely be in shortage post-2026; but diesel in surplus



Source: Company Data, EIA, Kpler, Evercore ISI Research; Demand reflects petroleum-based diesel, excluding biodiesel and renewable diesel.

Figure 62: California's gasoline and jet fuel imports primarily from Asia in 2024



Source: Company Data, Evercore ISI Research

Since 2020, California has witnessed a decline in refining capacity to ~1.7 MMBPD, including the conversion of some refineries to produce renewable fuels. This figure is set to decrease to ~1.4 MMBPD due to planned closures announced by PSX and VLO.

Regulatory burdens, shrinking local crude supply, higher operating costs and declining gasoline demand are accelerating refinery closures, eroding California's in-state processing capability and undermining long-term investment viability.

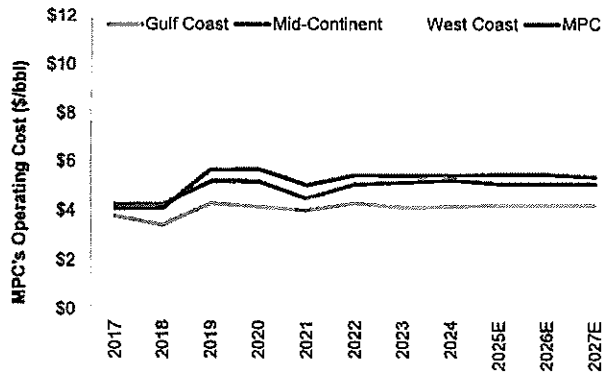
Regulatory Challenges. The state's stringent environmental regulations, including the recently enacted ABX2-1, mandate minimum fuel inventory levels and increased oversight of refinery maintenance. While aimed at preventing fuel supply shortages, these regulations have added operational complexities for refiners. SBX1-2, enacted in March 2023, granted the California Energy Commission (CEC) authority to cap refinery margins and impose penalties on refiners that exceed set limits, a measure that faced strong opposition from companies.

Stringent Fuel Specifications. California and other West Coast states have unique gasoline specifications, making it challenging to import compliant fuel from other regions or countries.

Traditionally, unplanned or planned outages in the region would prove a margin boon to those continuing to operate due to limited extra regional product flows. With increasing regulatory oversight (down to the timing of turnarounds) and a potential windfall profit tax (in law but yet to be exercised) operators are re-evaluating the logic or remaining in operation in the state.

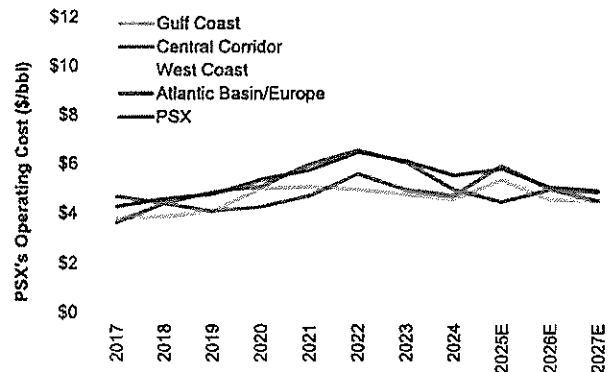
Company Benchmarks – Operating Costs

Figure 63: Operational excellence from MPC



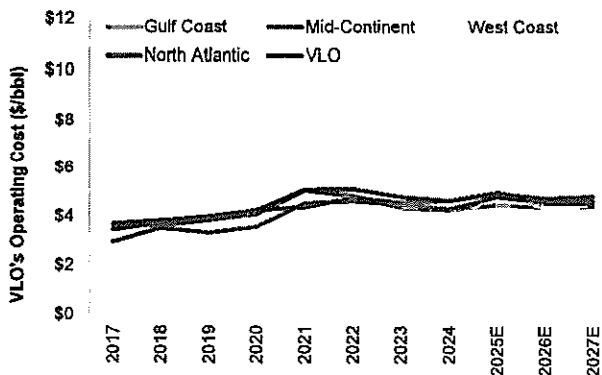
MPC's operating cost excludes turnaround costs
Source: Company Data, Evercore ISI Research

Figure 64: Cost cutting approving the outlook at PSX



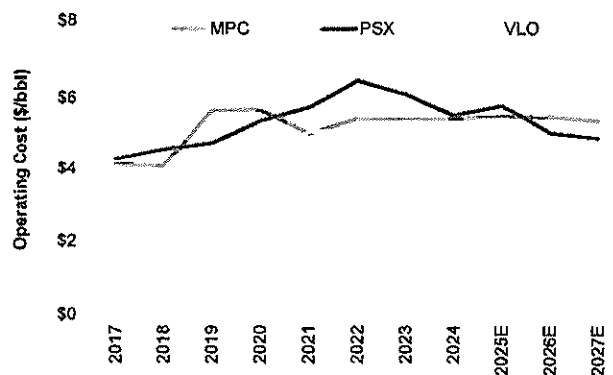
PSX's operating cost excludes turnaround costs. PSX's operating cost doesn't take into account of equity affiliates
Source: Company Data, Evercore ISI Research

Figure 65: VLO is a low-cost leader, with ~60% of refining capacity in the Gulf Coast



VLO's operating cost excludes turnaround costs
Source: Company Data, Evercore ISI Research

Figure 66: Operating cost moving higher, largely in line with the pace of inflation rate



Operating cost excludes turnaround costs. PSX's operating cost doesn't take into account of equity affiliates
Source: Company Data, Evercore ISI Research

Figure 67: US Independent Refiner segment and regional exposures

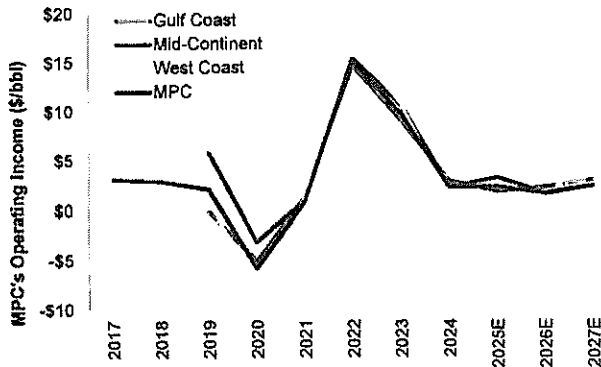
	Crude Capacity (MBPD)		% of Refining Exposure Post Mid-2026				% of Operating Income (2025-27 Est)			
	Current	Post Mid-2026	Atlantic	Gulf Coast	Central Corridor	West Coast	R&M	Midstream	RD / Ethanol	Chemicals
MPC	2,963	2,963	0%	42%	40%	19%	39%	64%	-2%	
PSX	1,841	1,702	32%	31%	31%	6%	37%	55%	-1%	9%
VLO	2,665	2,520	17%	61%	18%	3%	94%		6%	

Source: Company Data, Evercore ISI Research

High fixed costs mean unit economics will be substantially flattered by operators with higher utilization rates and limited unplanned downtime. Operational missteps will rapidly translate into higher costs, particularly on a unit level.

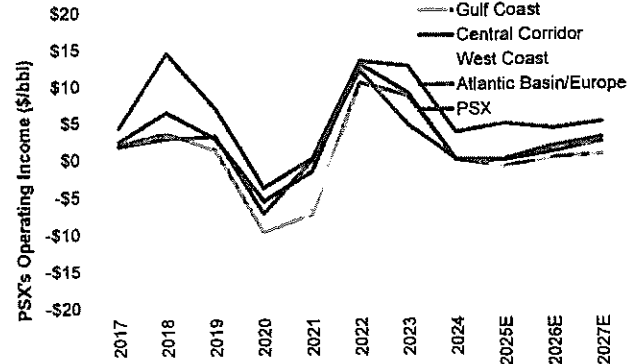
Company Benchmarks – Operating Income Off Highs

Figure 68: MPC has close economic rents in three regions



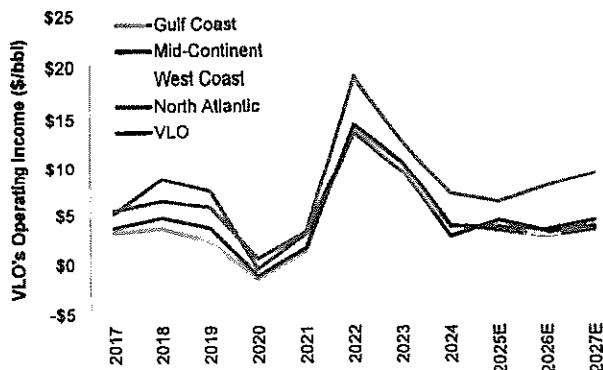
Source: Company Data, Evercore ISI Research

Figure 69: PSX's Central Corridor refineries are competitive with laggards in the West Coast



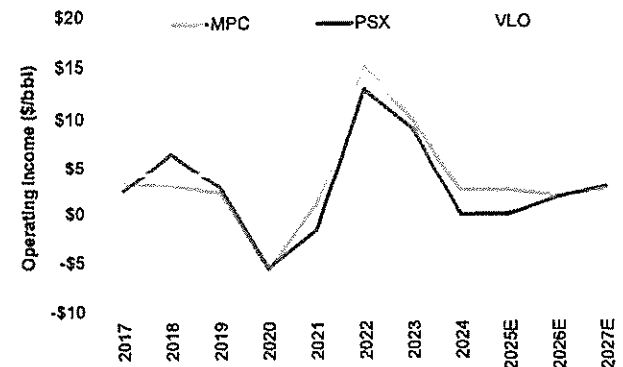
Source: Company Data, Evercore ISI Research; PSX's operating income per barrel considers equity affiliates

Figure 70: VLO: underperforming assets in the West Coast



Source: Company Data, Evercore ISI Research

Figure 71: VLO's margin leads peers



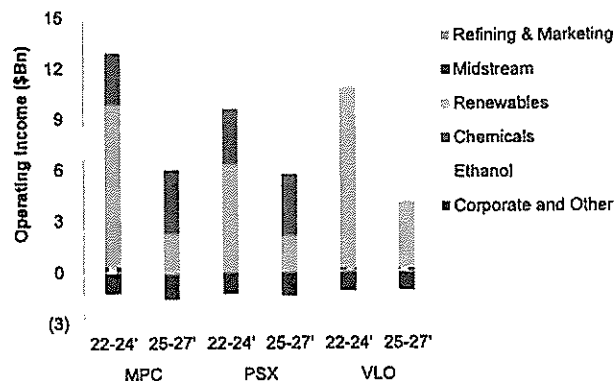
Source: Company Data, Evercore ISI Research

In general, refineries sitting in the West Coast have been generating lower margins than other regions. West Coast profitability will further be adversely impacted since gasoline margin will be capped in California after SBX1-2 under the backdrop of phase out sales of ICEs through 2035.

Both PSX and VLO's operating income will be impacted by accelerated DD&A due to refinery closures in the next few quarters.

Company Benchmarks – Lining Up the Portfolios

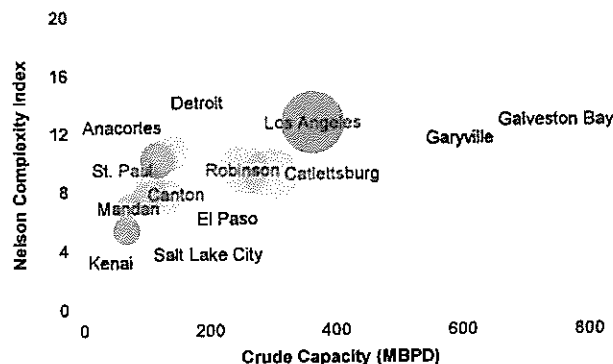
Figure 72: Refining & Marketing exposure: VLO (90% of operating income) > MPC = PSX (50%) in mid-cycle.



22-24' and 25-27' (EVR ISI est) reflects average operating income for each company. Both PSX and VLO's operating income will be impacted by accelerated DD&A due to refinery closures in the next few quarters.

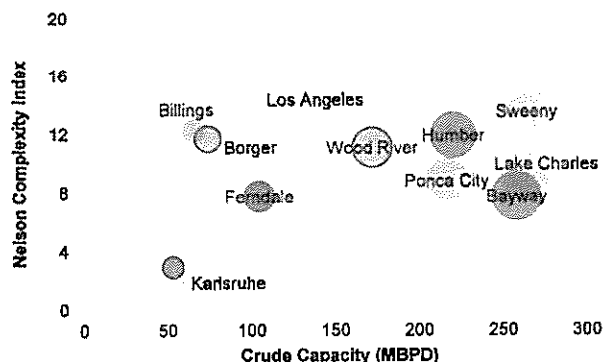
Source: Company Data, Evercore ISI Research

Figure 73: MPC has 13 refineries with total crude capacity of 2,960 MBPD: Gulf Coast (42%), Mid-Con (40%) and West Coast (19%)



Source: Company Data, OGJ, Evercore ISI Research

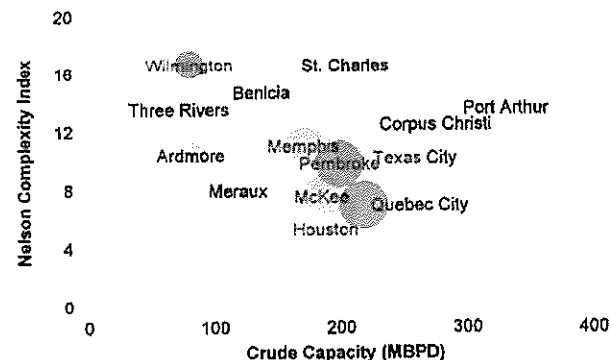
Figure 74: PSX has 10 refineries with net crude capacity of 1,700 MBPD: Gulf Coast (31%), Mid-Con (31%), North Atlantic (32%) and West Coast (6%)



Crude capacity reflects proportional share of the Borger refinery, Wood River refinery and MRO refinery in Karlsruhe, Germany. LA refinery will cease operations in late 2025.

Source: Company Data, OGJ, Evercore ISI Research

Figure 75: VLO has 14 refineries with total crude capacity of 2,520 MBPD: Gulf Coast (61%), Mid-Con (18%), North Atlantic (17%) and West Coast (3%).



Corpus Christi represents the combined capacities of two refineries – the Corpus Christi East and Corpus Christi West Refineries. Benicia will cease operations in 2Q26.

Source: Company Data, OGJ, Evercore ISI Research

Near 90% of VLO's operating income is contributed by refining and marketing, while MPC and PSX's exposure is below 50% in mid-cycle conditions in our view. During last three years 2022-2024, refining and marketing contributed 94%, 77% and 66% of operating income respectively for VLO, MPC and PSX. VLO is a low cost supplier with 60% refining capacity in the Gulf Coast. MPC, headquartered in Ohio, has most exposure in the Gulf Coast (42%) and Mid-Continent (40%). PSX is relatively diversified and balanced in different US regions.

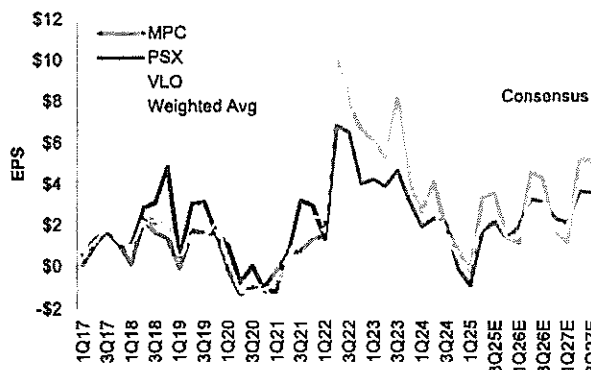
MPC owns the general partner (2%) of MPLX and ~63% of the outstanding MPLX common units. Due to ownership of the general partner, MPC controls MPLX and therefore it consolidates MPLX and records a noncontrolling interest for the interest owned by the public. MPC doesn't consolidate Martinez Renewables in Renewable Diesel segment. Figure 72 illustrates MPC's net interest in MPLX operating income.

PSX's income attributable to noncontrolling interests are de minimis since it doesn't consolidate WRB and CPChem, while they recognized the JVs' earnings under equity method accounting.

DGD is a JV with Darling Ingredients and VLO consolidates DGD's financial statements. Figure 72 illustrates MPLX's 50% interest in DGD's operating income.

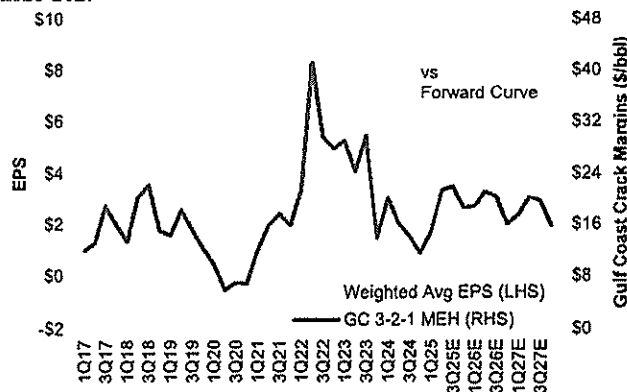
Upside to Near-Term Estimates

Figure 76: Market expects earnings to recover in 2025-2027



Source: Company Data, FactSet, Evercore ISI Research

Figure 77: Earnings expectations are below forward refining margins in 2025, but higher than forward refining margins in 2026-2027



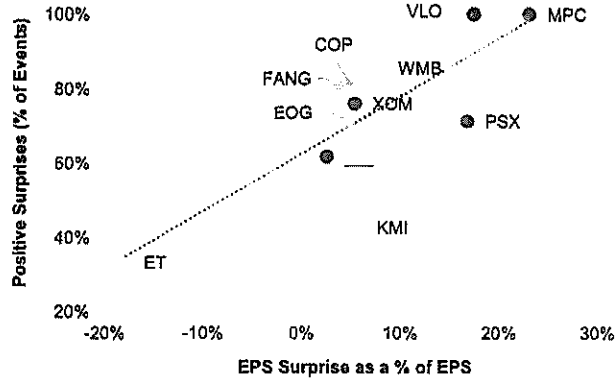
Source: Company Data, FactSet, Bloomberg, Evercore ISI Research

Consensus earnings for MPC, PSX and VLO are near \$8/share in 2024 and are expected to approximate \$6/share in 2025, \$11/share in 2026 and \$12/share in 2027. Consensus earnings are below estimates indicated by the forward curve in 2025, while above estimates indicated by the forward curve in 2026 and 2027, thus we see room for upward revision for 2025 earnings. Our earnings estimates are 12% above consensus in 2025, 22% below consensus in 2026, and 7% below consensus in 2027.

While margins rose in recent months, they are peaking in our view as positive seasonal factors has enhanced the outlook.

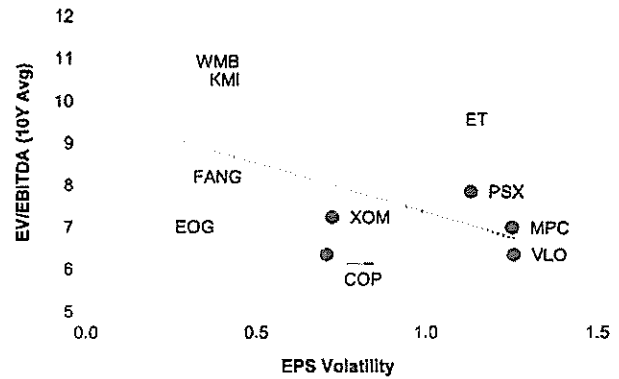
Refiners Traditionally Trade at Low Multiples

Figure 78: Refiners' earnings releases often deliver positive surprises, particularly from VLO and MPC, which have consistently beaten consensus estimates since 2020.



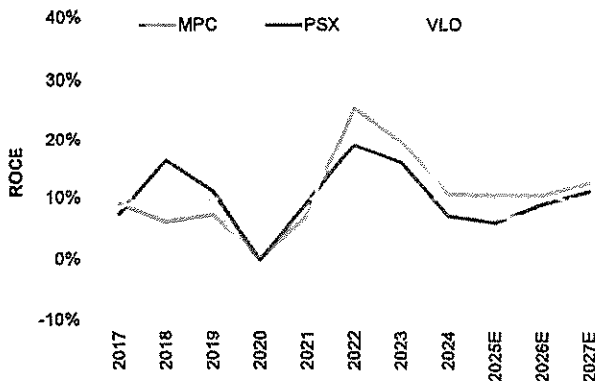
Source: Company Data, FactSet, Evercore ISI Research

Figure 79: Refiners trade at low multiples partially due to their earnings volatility, which is both seasonal and cyclical



Source: Company Data, FactSet, Evercore ISI Research

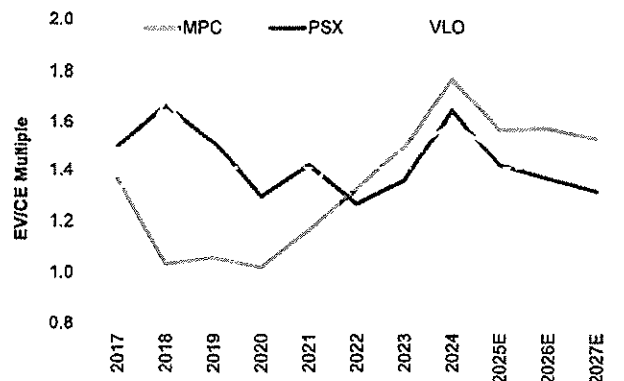
Figure 80: US refiners' ROCE have declined to mid-cycle



MPC ROCE consolidates MPLX, which includes non-controlling interests' portion of NOPAT and capital employed

Source: Company Data, FactSet, Evercore ISI Research

Figure 81: ... but EV/CE trading at historical high multiples, lifted by midstream mix, specifically for MPC and PSX



MPC's EV and CE consolidates MPLX, which includes non-controlling interests' equity and debt

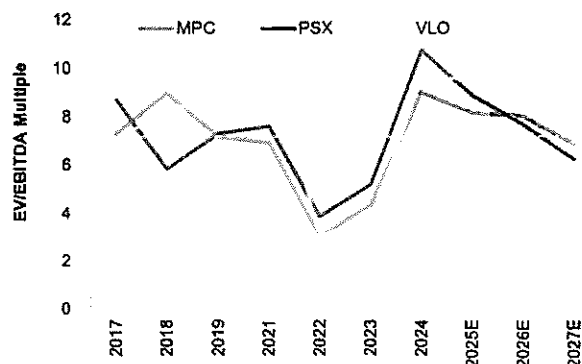
Source: Company Data, FactSet, Evercore ISI Research

Refiners' earnings releases often deliver positive surprises, particularly from VLO and MPC, which have consistently beaten consensus estimates since 2020. However, due to earnings volatility, Refiners usually trade at low multiples.

ROCE is approaching 10% in the next few years in our case, while EV/CE is currently near 1.5x, slightly above mid-cycle 1.4x.

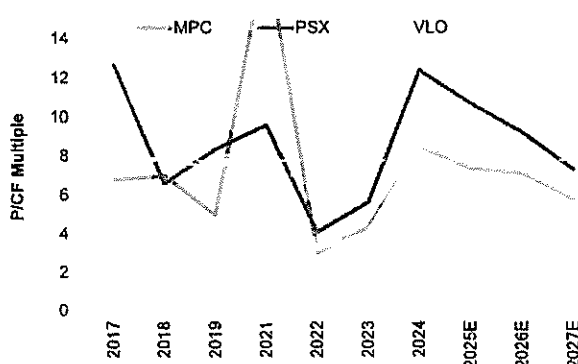
Valuations Reflect Lingering Optimism

Figure 82: EV/EBITDA above historical average



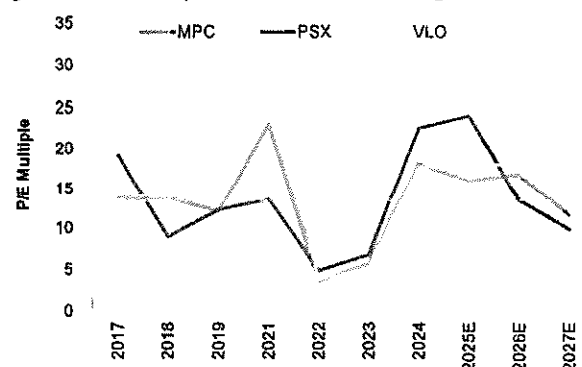
Note: exclude year 2020 which is out of range.
Adjust VLO's EBITDA lower to reflect post-turnaround.
Source: Company Data, FactSet, Evercore ISI Research

Figure 83: P/CF multiple above historical average



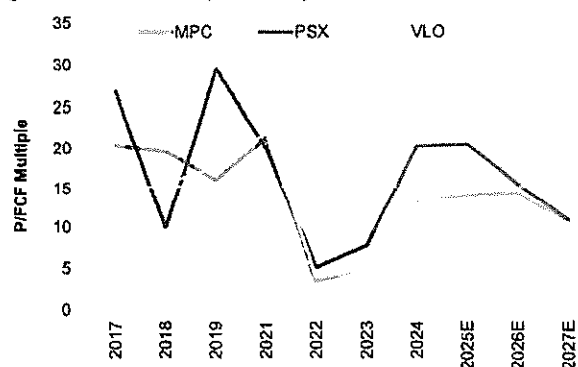
Note: exclude year 2020 which is out of range.
Source: Company Data, FactSet, Evercore ISI Research

Figure 84: P/E multiple above historical average



Note: exclude year 2020 which is meaningless.
Source: Company Data, FactSet, Evercore ISI Research

Figure 85: P/FCF multiple healthy

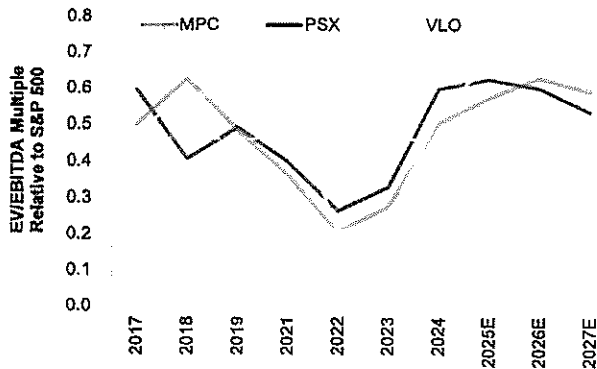


Note: exclude year 2020 which is meaningless.
Source: Company Data, FactSet, Evercore ISI Research

Refiner valuations are modestly above average multiples. EV/EBITDA, P/E and P/CF multiples are above historical average. P/FCF multiple remains below historical average due to capital discipline.

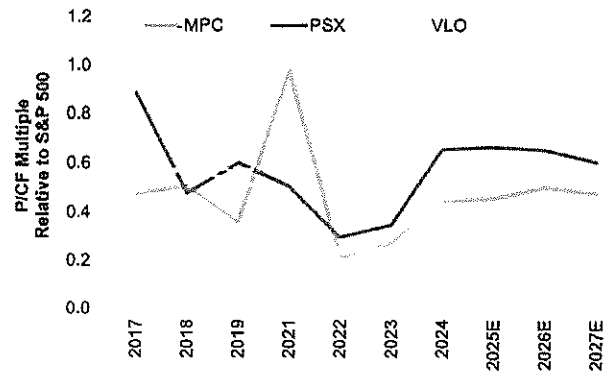
Relative Valuations

Figure 86: Relative EV/EBITDA above historical average



Source: Company Data, FactSet, Evercore ISI Research

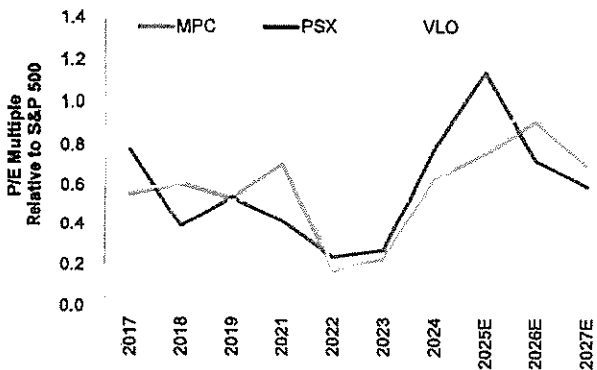
Figure 87: Relative P/CF multiple close to historical average



Note: exclude year 2020 which is out of range

Source: Company Data, FactSet, Evercore ISI Research

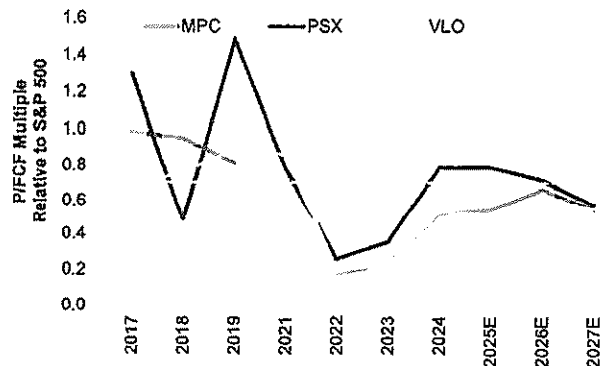
Figure 88: Relative P/E multiple above historical average



Note: exclude year 2020 which is meaningless.

Source: Company Data, FactSet, Evercore ISI Research

Figure 89: P/FCF multiple below historical average



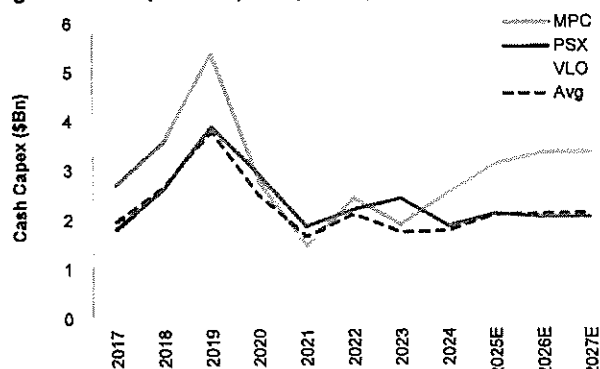
Note: exclude year 2020 which is meaningless.

Source: Company Data, FactSet, Evercore ISI Research

Relative to S&P 500, refiner valuations are modestly above historical average multiples too but remain trading at deep discount vs S&P 500. EV/EBITDA, P/E and P/CF multiples are above historical average. P/FCF multiple remains below historical average due to capital discipline.

Capital Discipline and Shareholder Distributions

Figure 90: Disciplined capital spending



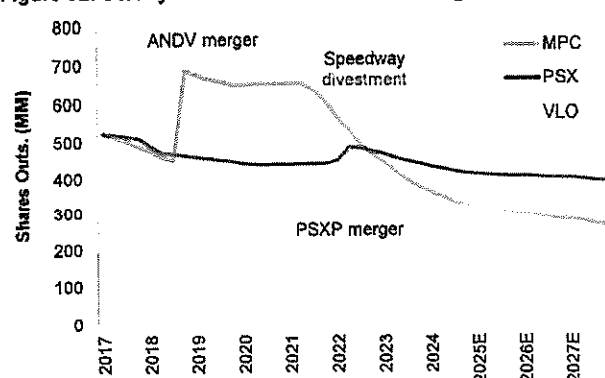
Note: VLO's capex excludes turnaround capex, thus comparable with peers.
Source: Company Data, Evercore ISI Research

Figure 91: Balance between capex and shareholder distributions



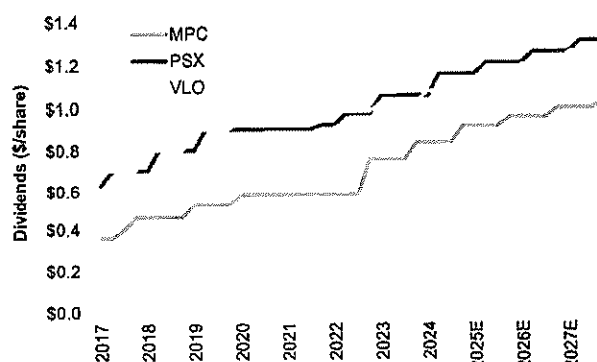
Note: VLO's capex excludes turnaround capex, thus comparable with peers.
Source: Company Data, Evercore ISI Research

Figure 92: Steady decline of shares outstanding



Source: Company Data, Evercore ISI Research

Figure 93: Dividends are resilient and consistent



Source: Company Data, FactSet, Bloomberg, Evercore ISI Research

US refiners are expected to remain capital disciplined. Capital spending will be contained near \$3.3 Bn for MPC (consolidated including MPLX), \$2 Bn for PSX (excluding JV), and \$1 Bn for VLO (excluding turnaround capex) in our view in the years to come. If so, under mid-cycle scenario, cash towards capex will be below 40% of total allocations, while shareholder distributions will be over 60%.

Balance between spending and shareholder distributions almost always leads to higher returns and valuation, and positive shareholder outcomes. This model is especially productive in mature industries such as Energy and has led to superior Total Shareholder Return (TSR).

MPC returned \$55 Bn to shareholders via buybacks and dividends between 2017 and 2024. Shares outstanding has been cut by more than half since the ANDV merger. In addition to strong refining performance in recent years, after-tax cash proceeds of \$16.5 Bn from Speedway divestment strengthened MPC's its balance sheet in 2021, enabling peer-leading shareholder distributions.

PSX returned \$30 Bn to shareholders via buybacks and dividends during 2017-2024, while VLO returned \$28 Bn to shareholders via buybacks and dividends during 2017-2024.

Largely driven by robust share buyback program, we estimate MPC, PSX and VLO's shares outstanding will decline by 6%, 2% and 4% per year on average in the next three years under current market conditions. As a result, per share metrics such as EPS could grow without support from profitability.

PSX – Underlying Improvements to Come, Debate Continues, Outperform, PT \$130

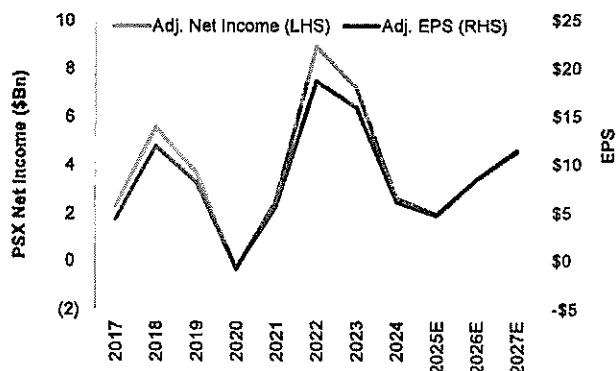
A recent proxy contest and well publicized activist campaign had made the stock one of the most hotly debated in the sector YTD. After a period of challenging operational performance in refining post-COVID, PSX has worked hard to re-establish credibility surrounding operational performance and target setting. Further, the acquisition of DCP (closed in June 2023, \$3.8 Bn) was a big step for the portfolio, whereby midstream assets could be better integrated, controlled, and ultimately grown. Additional capital allocation towards midstream since DCP has surprised investors to the upside and pushed many to adopt a 'wait and see' view pending clarity on the forward outlook. The EPIC system acquisition (closed in April 2025, \$2.2 Bn) likely further exacerbated this dynamic as this proved another network that may drive additional acquisitions to secure more molecules close to the wellhead. While PSX has clearly identified mid-cycle expectations for each business and a desire to incrementally de-lever the balance sheet with divestiture proceeds, the door towards future M&A in midstream was never fully closed. We do not expect the debate around portfolio configuration and strategy to dissipate post the proxy contest. The valuation gap (PSX at a 10%+ discount to MPC specifically) opportunity to benefit from a stronger refining environment (for the balance of 2025 at least) to improve results here, and some clarity on the forward strategy on midstream (delivering the \$4+ Bn of run rate EBITDA) and chemicals (lingering investor questions surrounding CPChem) are all on the docket here.

Phillips 66 was incorporated in Delaware in 2011 in connection with a restructuring of ConocoPhillips (COP) that separated its downstream businesses into an independent, publicly traded company named Phillips 66. Phillips 66 (PSX) is a leading competitor in the Refining (29% of capital employed), Marketing and Specialties (14%), Midstream (41%), Chemicals (11%) and Renewable Fuels (5%) segments.

PSX underperformed peers in recent years due to low capture rates and rising costs in refining and a prolonged trough for chemical margins (exposure in olefins / polyolefins via a 50% ownership of CPChem). Performance has improved since 2022 when the company rolled out several strategic priorities, which involve: 1) improved refining performance (and management), 2) capture value from wellhead to market, 3) execute business transformation, 4) maintain financial strength and flexibility, 5) drive disciplined growth and returns, and 6) increase shareholder distributions.

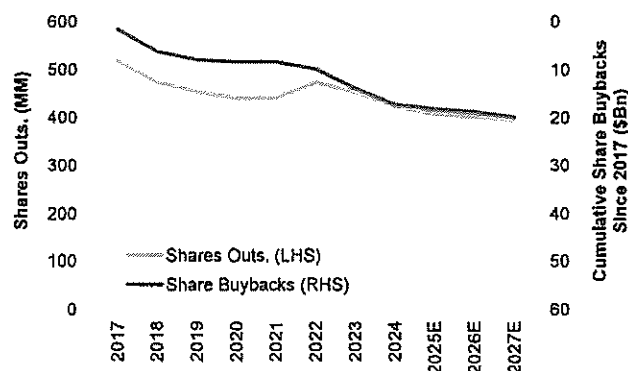
Mid-cycle EBITDA was guided to rise from \$10 Bn in 2022 to \$14 Bn in 2025 to \$15 Bn in 2027. Numbers the street have questioned, and investor skepticism has grown. The company expects to add \$0.5 Bn of EBITDA from Midstream (organic growth and M&A) and \$0.5 Bn from Chemicals (two mega projects in the Gulf Coast and Qatar). 2025 Midstream adjusted EBITDA is expected to rise to \$4 Bn post the fold in of the EPIC system. In refining, adjusted controllable costs per barrel has been reduced by >\$1/bbl, from over \$6.98/bbl in 2022 to \$5.90/bbl in 2024. Phillips 66 (PSX) aims to further lower this figure to \$5.50/bbl by 2027. The company is targeting over \$500 MM in reductions across operating expenses, SG&A, and freight costs by 2027.

Figure 94: We expect EPS to double over 2025-2027 driven by performance improvement in refining, capacity expansions + margin normalization @ CPChem, and growth in Midstream



Source: Company Data, Evercore ISI Research

Figure 95: Shares outstanding decline ~20% or (3.5% CAGR) since 2017. Our estimates have share count reductions at a slower pace (1.9% CAGR) over the 2025-27 forecast.



Source: Company Data, Evercore ISI Research

Capital spending appears likely to be near \$2.1 Bn in 2025, of which \$1.0 Bn is for sustaining the business and \$1.1 Bn is allocated towards growth projects. PSX expects to maintain a total capital expenditure budget of approximately \$2 Bn annually through 2027. The stable cash generation from Midstream business can cover the company's dividend (\$1.9 Bn) and sustaining capital (\$1.0 Bn). PSX intends to return >50% of operating cash flow to shareholders through cycle.

De-leveraging has come primarily via asset sales at PSX. To date, ~\$5 Bn of asset divestitures have been announced. Primary divestiture targets are non-operated pipeline, non-strategic non-core assets in Midstream, as well as marketing and retail assets in Europe.

PSX has worked to refine a debt target and explain the optimal capital structure to investors. Net debt to capital ratio was 38% at 1Q25, above the target range of 25-30%. PSX plans to reduce total debt to \$17 Bn and to a sub-30% net debt-to-cap level by YE 2027. The timing is dependent on the margin environment and the market for planned dispositions. Current run rate EBITDA of Midstream and M&S segments are near \$6 Bn at mid-cycle assumptions. At 3x, net debt level is close to \$18 Bn with no debt assigned to refining due to observed volatility. This approach to balance sheet is deemed to best preserve shareholder value through cycle.

Center of the Debate - Organic & Inorganic Growth in Midstream

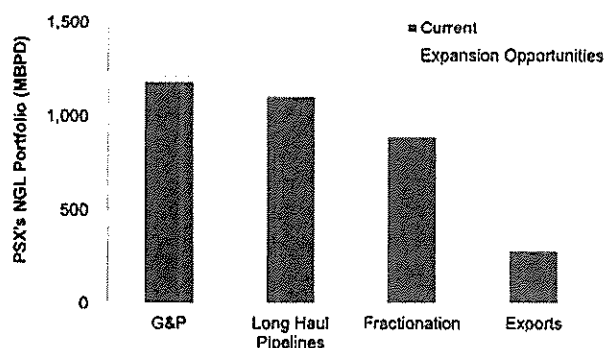
PSX's midstream consists of two businesses: Transportation (1/3 of mid-cycle EBITDA), and NGL and Other (2/3 of mid-cycle EBITDA). 80% of midstream business is fee-based and the remaining 20% is impacted by NGL and natural gas prices. PSX is focused on growing its fully integrated natural gas liquids (NGL) wellhead-to-market value chain within the Midstream segment. As part of executing this strategy, PSX completed a number of transactions that increased its economic interest in DCP LP to 86.8% during 2022-2023, followed by acquisitions of the Pinnacle midstream (Permian G&P) and EPIC (NGL pipeline, storage, Permian G&P) assets.

PSX is capacity long on the Gulf Coast (Sweeny fractionators 1, 2, 3, 4 with 550 MBPD nameplate capacity and Freeport export dock with 260 MBPD LPG export capacity) and should be expected to continue to focus on access to wellhead supply, especially in the Permian, where assets are in proximity and connected to the broader PSX system. Our sense is the pace of acquisitions particularly in the Permian since the DCP consolidation has surprised investors. This has led some to believe there was a mismatch between pipeline and wellhead access and acquisitions were re-balancing the portfolio. PSX has communicated the desire to continue to bolt-on in places where assets enjoy commonality and integration benefits in the \$0.5-2 Bn range. EPIC was something of a departure from this broad strategic direction as it involved both long haul transportation assets in addition to G&P in the Permian. PSX has also shown an ability to partner where possible with 3rd parties to gain access to wellhead volumes and notes inorganic acquisitions are not the only path with which to execute this strategy.

The Sweeny Hub is undergoing debottleneck projects and PSX expects to expand fractionation capacity by adding more fractionators if necessary. The fractionators are supported by long-term customer commitments primarily to export markets and Asia. In addition, PSX has marine capabilities to take advantage of LPG margins across the value chain. LPG tankers are used to export propane and butane from PSX owned fractionation, transportation, and storage infrastructure in addition to 3rd party volumes. PSX will often maintain custody of these barrels until final delivery in end markets for exports. Control of the entire value chain drives value, in PSX's estimation.

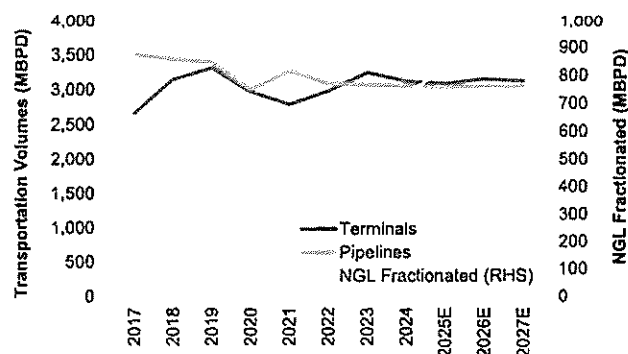
PSX has built a high-quality midstream business and adjusted EBITDA has grown from \$1 B in 2015 to \$2.3 B in 2019 to \$3.7 Bn in 2024. PSX should be expected to continue to further strengthen and expand service offerings in NGL, thus Midstream earnings should continue to grow as a % of the total company, however the growth rate in Midstream business is set to slow to 6-7% annually in our view. Midstream is on track to hit \$4 Bn of running EBITDA in 2025 and approach \$4.5 Bn by 2027. For modelling, Midstream is approaching ~\$750 MM per quarter of operating income post the closing of EPIC.

Figure 96: NGL wellhead-to-market value chain



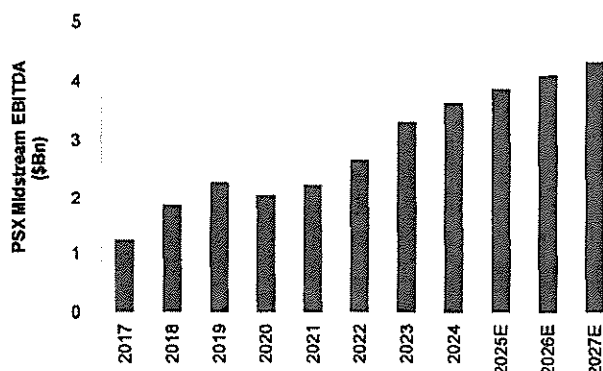
Source: Company Data, Evercore ISI Research

Figure 97: The fractionators at the Sweeny Hub more than tripled PSX's fractionated volumes. EPIC acquisition will support further growth in 2025.



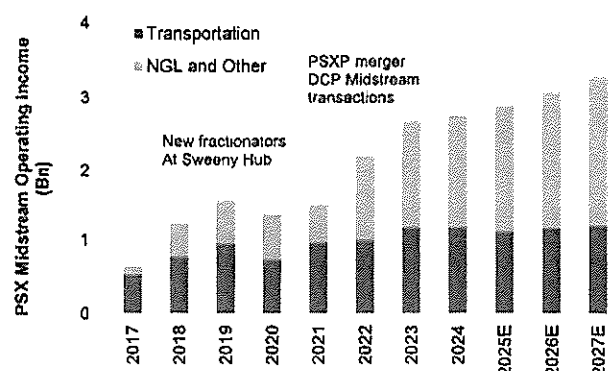
Source: Company Data, Evercore ISI Research

Figure 98: PSX's midstream EBITDA steps up on PSXP merger, DCP Midstream transactions, and NGL wellhead to market strategy



Source: Company Data, Evercore ISI Research

Figure 99: Growth in PSX's midstream operating income driven by NGLs



Source: Company Data, Evercore ISI Research

High Quality Commodity Chemicals Assets

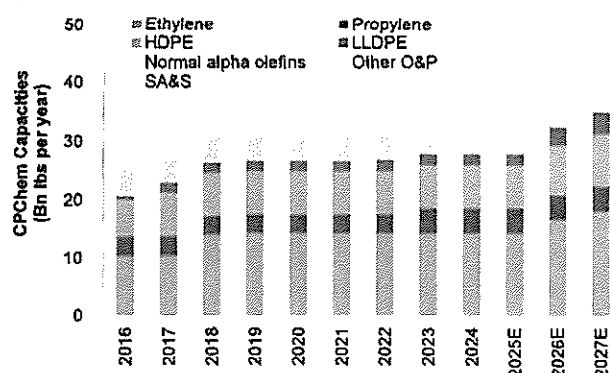
The Chemicals segment consists of a 50% equity investment in CPChem. CPChem's investments are concentrated in the US (80%). Importantly, the company sources 100% of its ethane from North America and the Middle East where significant cost advantages are present. With an A2 credit rating, CPChem is self-funded and doesn't need support from PSX.

Olefins and Polyolefin (O&P) represents key components of the global portfolio, at 80% of capacity. The joint venture has scale, as one of the largest producers in the US and the world, of ethylene and polyethylene. Specialties, Aromatics and Styrenics (SA&S) comprises the remaining 20% capacity. Major products include benzene, cyclohexane, styrene, polystyrene, etc.

CPChem is a significant beneficiary of low natural gas and NGL prices which lead to attractive power and production costs versus non-US peers. It also benefits from wide spreads between crude oil and natural gas given its ability to process lighter feedstock i.e. NGLs rather than naphtha. With significant growth in natural gas and NGL supply in the US, production economics will remain advantaged for US producers of basic petrochemicals. This is especially true for portfolios with assets concentrated along the Gulf Coast, like CPChem.

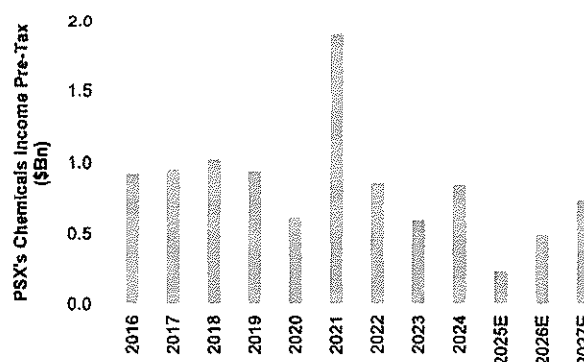
CPChem has finished a world-scale ethane cracker (3.3 billion pounds per year) and two polyethylene derivatives facilities (each with 1.1 billion pounds per year) along the Gulf Coast (USGC I) in 2017. CPChem and QatarEnergy are taking further steps to grow chemicals output with two world-class projects: one on the US Gulf Coast (USGC II or the Golden Triangle Polymers) and another in Ras Laffan, Qatar. Both facilities are expected to start up in 2026.

Figure 100: We expect CPChem's O&P capacity to rise by 60% from 2016 to 2027 driven by three major projects: USGC 1, USGC 2, and Ras Laffan



Source: Company Data, Evercore ISI Research

Figure 101: Chemical operating income at the depth of the downturn



Source: Company Data, Evercore ISI Research

The USGC II (CPChem 51% share) will include a 4.6 billion pounds per year ethylene cracker and two 2.2 billion pounds per year high-density polyethylene (HDPE) units. CPChem and QatarEnergy also will pursue a petrochemicals complex (CPChem 30% share) in Qatar to produce ethylene and high-density polyethylene (HDPE). The facility is expected to have a 4.6 billion pounds per year ethane cracker and two high-density polyethylene derivative units with a combined capacity of 3.7 billion pounds per year.

Full chain ethane to polyethylene margins were weak in recent years and are expected to deteriorate further in 2025 before recovery in 2026-2027, in our view. PSX's Chemicals income is expected to decline from \$840 MM in 2024 to \$240 MM in 2025, then gradually recover to \$500 MM in 2026 and \$740 MM in 2027 in our model. CPChem growth has been self-funded since inception. Free cash flow out of CPChem will improve in 2027 and beyond, from \$525 MM in 2024 to \$762 MM in 2027 in our model, driven by falling capital spend post major projects.

Anticipated Improvement in Refining Performance

PSX owns and operates 11 refineries with net crude capacity of 1,840 MBPD: Gulf Coast (29% of capacity), Mid-Con (29%), North Atlantic (29%) and West Coast (13%). The Los Angeles refinery is expected to cease operations in October 2025. This closure will more than half cut PSX's exposure to PADD V (West Coast market dynamics) and shrink aggregate net crude capacity to 1,700 MBPD.

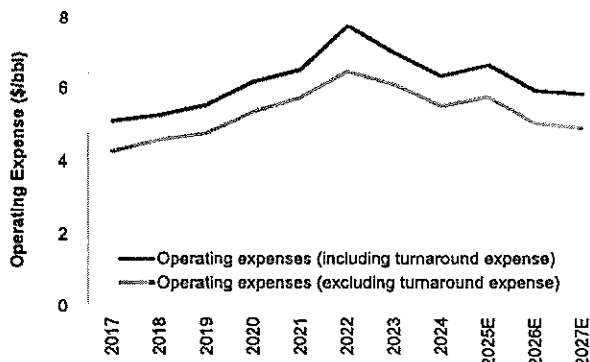
PSX's refining profits fell behind peers in the last several years due to underperforming assets in the Gulf Coast, North Atlantic and West Coast mainly dragged by low capture rate, as well as higher than industry operating cost.

Underpinned by PSX's performance improvement initiatives since late 2022, controllable cost has declined by ~\$1.08/bbl to near \$5.90/bbl. Capacity utilization also recovered to 95% in 2024 vs 90% in 2022. As an enabler of capture rate, clean product yield improved by from 84% in 2022 to 87% in 2024.

Phillips 66 (PSX) aims to further lower controllable cost to \$5.50/bbl by 2027. The company is targeting over \$500 MM in reductions across operating expenses, SG&A, and freight costs till 2027. Every \$0.50/bbl of cost reduction is expected to improve adjusted EBITDA by \$315 MM. The company is targeting over \$500 MM in reductions across operating expenses, SG&A, and freight costs till 2027 relative to 2024 baseline.

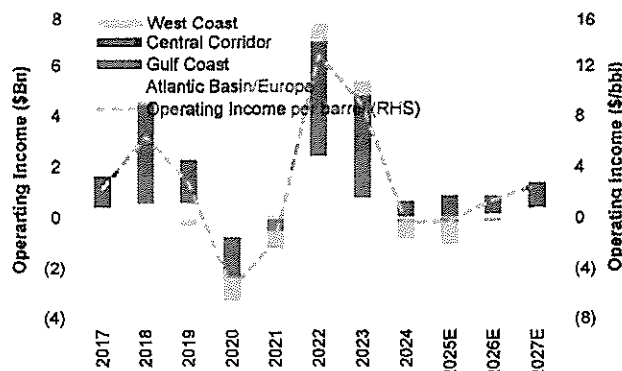
PSX plans to cease operations at its Los Angeles-area refinery in 4Q25 after careful consideration of many options. Among them, redevelop the land is the greatest as these sites offer an opportunity to create a transformational project that can generate economic development. The plan to cease operations at Los Angeles Refinery resulted in the acceleration of depreciation. Going forward, the company expects ~\$230 MM per quarter of additional depreciation through 4Q25. As a result, 2025 refining operating income is expected to be lower by ~\$800 MM due to this accelerated DD&A. This annual impact will normalize by 2026+.

Figure 102: Refining operating expenses have decreased by ~\$1.00/bbl between 2022 and 2024, and are projected to decline by an additional ~\$0.50/bbl by 2027



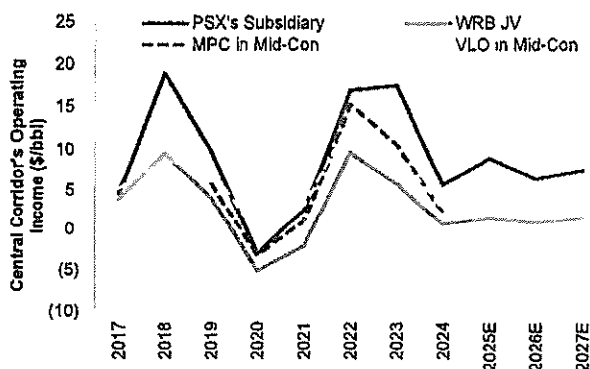
Source: Company Data, Evercore ISI Research

Figure 103: Forecasting a more limited recovery in Refining operating income



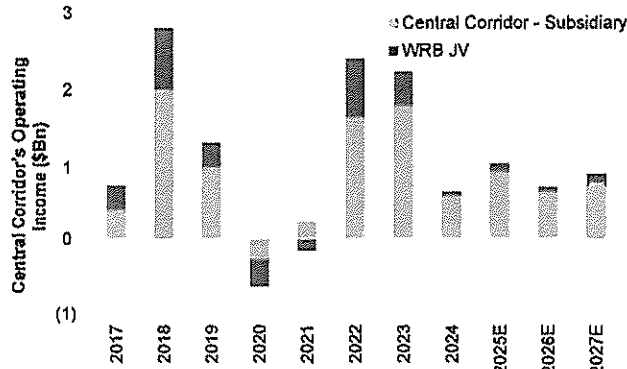
Note: West Coast income is impacted by accelerated DD&A in LA refinery.
Source: Company Data, Evercore ISI Research

Figure 104: WRB JV's economics is falling behind



Source: Company Data, Evercore ISI Research

Figure 105: Negligible income is expected from WRB JV in 2025-27



Source: Company Data, Evercore ISI Research

PSX is the operator and managing partner of WRB, a 50 percent-owned joint venture that owns the Wood River and Borger refineries. WRB's performance is behind peers and PSX's wholly owned subsidiary (Figure 104). Since this WRB is partially owned by PSX, the priority and urgency to fix it is probably at the bottom of the list, thus we don't model WRB's economics to improve much over 2025-2027.

The business strategy seeks long term competitiveness through 1) maintaining operating excellence, 2) increasing asset availability, 3) enhancing market capture, 4) reducing operating cost and 5) managing the portfolio.

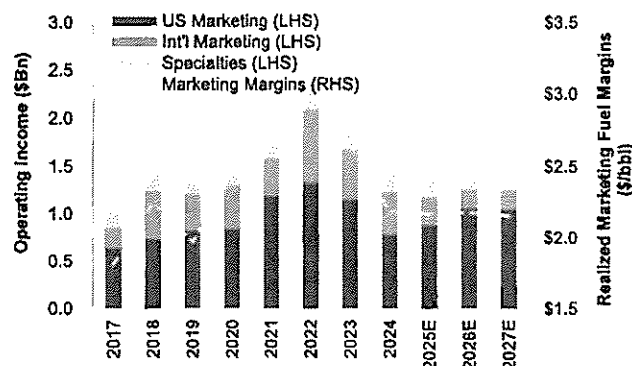
Strong Returns in Marketing & Specialties

PSX markets gasoline, diesel and aviation fuel through the Phillips 66, Conoco, 76, and JET brands. It had approximately 7,800 marketing outlets in the US, Puerto Rico and the UK. A high percentage of branded marketing sales are in the Midcontinent, Rockies and West Coast regions. In the Gulf Coast and East Coast, most sales are conducted via the unbranded channel of trade, which does not require a highly integrated marketing network to secure product placement for refinery pull through. PSX has export capability at coastal refineries to meet international demand.

After divestment of Coop JV in Switzerland and retail marketing assets in Austria and Germany (sold 65% of interest and retained 35%), PSX's international operations mainly focused on the UK. JET operates a network of over 300 independently owned and company-operated petrol stations across the UK. In addition, PSX supplies fuels to wholesale customers through a network of fuel terminals. PSX's margins are tough in the UK.

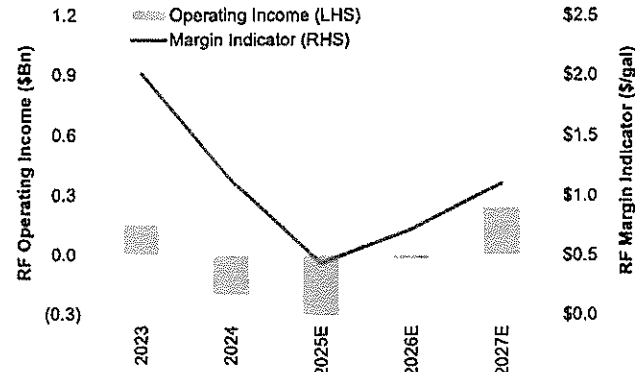
In Specialties, PSX manufactures and sells automotive, commercial, industrial and specialty lubricants which are marketed worldwide under the Phillips 66, Kendall, Red Line and other private label brands. PSX owns a 50% interest in Excel, an operated joint venture that owns a hydrocracked lubricant base oil manufacturing plant with 22 MBPD capacity.

Figure 106: Lower volatility in M&S results



Source: Company Data, Evercore ISI Research

Figure 107: Renewable fuels operating income is in the red



Source: Company Data, Evercore ISI Research

Challenging Environment for Renewable Fuels

PSX produces renewable fuels at its San Francisco and Humber refineries. Rodeo Renewable Energy Complex reached full processing rates of ~50 MBPD and 1Q processed volumes averaged 44 MBPD. PSX is transitioning to lower CI materials, securing a wide range of feedstocks, improving yield from pre-treatment and hydrocrack process, delivering these renewable fuels all the way through to retail stations, and producing renewable jet that can feed into SAF, to optimize the economic performance of the assets. PSX expects to produce more renewable jet, while reducing the supply of renewable diesel. The renewable fuel production from Rodeo is expected to be distributed to customers in California, Oregon and Washington.

BTC to PTC transition starting January 2025 will hurt margins but RIN prices may increase to offset some impacts. In addition, the PTC program could potentially back out imports of renewable diesel. The economics remain challenging following the closure of several biodiesel plants.

Outperform Rating, PT \$130

In our model, EPS estimates will decline modestly to ~\$6.3/shr in 2025, then grow to ~\$8.4/shr in 2026 and ~\$11.5/shr in 2027 driven by performance improvement in refining, mid-single-digit growth in Midstream, margin recovery and volume growth in Chemicals, asset sales in Marketing, and modest decline in shares outstanding due to buybacks. Accelerated DD&A in LA refinery will drag 2025 EPS by near \$1.5/shr., a headwind. This negative impact will annualize away in 2026. Our EPS estimates in table below have removed this impact thus 2025 number is more comparable and projective.

Adjusted levered FCF yield is projected to grow in the next three years: 4.8% in 2025, 6.2% in 2026 and 8.9% in 2027, or 6.6% on average. Shareholder return yield is estimated at 5.7%, 5.3% and 6.5% respectively, or 5.8% on average in 2025-2027. Total debt will drop below \$17 Bn by year end of 2027 in our model.

Figure 108: Fair value is near \$141/shr on SOTP model

	2025E		Value	
Sum of the Parts	EBITDA*	Multiple*	(\$MM)	\$/shr.
Midstream	3,891	10.0x	38,909	95
Chemicals	834	11.4x	9,510	23
Refining	1,559	7.0x	10,916	27
Marketing & Specialties	1,716	11.0x	18,878	46
Renewable Diesel*	250	8.0x	2,000	5
Corporate	(499)	9.5x	(4,741)	(12)
Enterprise Value	7,752	9.7x	75,471	184
Debt			(18,803)	(46)
Cash			1,489	4
Pension			(311)	(1)
Net Debt (incl pension)			(17,625)	(43)
Equity Value			57,846	141

* EBITDA is post turnaround.

* Renewable diesel EBITDA is not for year 2025.

* CPChem mid-cycle assumption. O&P PE post Golden Triangle + RLP = (9.9 + 2.2 + 1.1) 13.2 mm lbs gross capacity. 30cpp midcycle full chain margin, assuming 85% capacity utilization, \$3.4 Bn O&P EBITDA grossing up for SA&S contribution to \$400 mm EBITDA. \$3.8 Bn EBITDA for CPChem 100% basis, applying 5x to midcycle (DOW/LYB peers) equates to \$9.5 Bn net to PSX 50%.

* Multiple is derived from figure 144 at the end of document.

Source: Company Data, Evercore ISI Research

Using historical valuation metrics, the table below illustrates PSX can support \$132/shr in 2026 and \$167/shr in 2027. Using SOTP model, we arrive at a fair value of \$141/shr.

Figure 109: Positive outlook on EPS, FCF, EBITDA, and CFPS

	2024	2025E	2026E	2027E
EPS	6.6	6.3	8.4	11.5
FCFPS	6.8	5.6	7.3	10.4
EBITDA	7,255	7,185	8,096	9,685
CFPS	11.2	10.7	12.3	15.5

Note: EBITDA is post turnaround.

2024 and 2025 EPS are adjusted higher to remove the impacts of accelerated DD&A due to Los Angeles refinery.

Source: Company Data, Evercore ISI Research

Figure 110: Our \$130 PT reflects 2026 estimates times 8-year average (2017-2024) multiples.

	2025E	2026E	2027E	8Y Avg Multiple
P/E	\$89	\$119	\$162	14.1x
P/FCF	\$95	\$124	\$178	17.1x
EV/EBITDA	\$90	\$109	\$144	7.5x
P/CF	\$98	\$112	\$142	9.1x
Average	\$112	\$132	\$167	

Source: Company Data, Evercore ISI Research

Phillips 66 (PSX)

Outperform

\$130/shr PT

Figure 111: Bull / Base / Bear Outlook



Source: Company Data, Evercore ISI Research

Bull Case - \$160	Base Case - \$130	Bear Case - \$90
13x P/E multiple on \$12/shr EPS	14x P/E multiple on \$9/shr EPS	15x P/E multiple on \$6/shr EPS
Above-cycle environment. Successful operational improvement and above-cycle margins in different segments drive robust cash flow, which support consistent dividend growth and significant repurchases, as well as debt reduction. Maintain capital discipline.	Executing on plan. Companywide results continue to grow on performance improvement initiatives. Maintain capital discipline, steady cash flow, dividend growth and meaningful share buybacks through plan period.	Unconstructive macro environment. Below-cycle refining, chemicals, marketing and renewable diesel results dragged by weak margins. Operational improvement falls short of plan. Dividends can grow with minimum buybacks.

Investment Thesis

PSX has worked to improve performance in refining and better define the value proposition for shareholders (well-articulated and more reasonable mid-cycle EBITDA assumptions, clear shareholder returns drivers, balance sheet targets). Our sense is acquisitions in Midstream have surprised to the upside both in terms of absolute size and number, worrying the market that more capital deployed was needed here to realize the full value of the network and the integrated strategy. Post a recent proxy contest, all indications suggest the debate over the integrated model and future design of the portfolio continues. Additional strategic clarity and execution (particularly in refining) should help narrow the valuation gap vs. peers.

Key Drivers

- **Improve refining performance.** PSX seeks long term competitiveness through 1) maintaining operating excellence, 2) increasing asset availability, 3) enhancing market capture, 4) reducing operating cost and 5) managing the portfolio.
- **Capture value from wellhead to market in Midstream.** PSX will continue to strengthen and expand service offerings in NGL, thus Midstream earnings should continue to grow at single digit.
- **Advantaged Chemicals portfolio at the low-end of the cost curve.** PSX's Chemicals income is expected to bottom in 2025 and then improve in 2026-2027, driven by capacity growth and margin recovery. Our estimates reflect margins remain at cycle low during the next 3 years (consistent with our commodity chemical coverage elsewhere).
- **Strong and resilient returns on Marketing & Specialties.** PSX generates double-digit ROCE from M&S with minimum capex needed.
- **PSX operates a portfolio of quality assets.** Earnings potential is substantial with operational improvement.

Risks

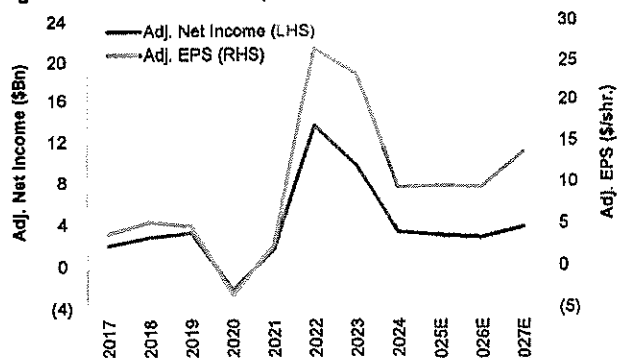
- Should oil market become oversupplied due to sluggish economic growth, accelerated growth in non-OPEC+ supply or changes in OPEC+, it could lead to price volatility, poor returns, and rising cost of capital.
- Rising natural gas prices on a BTU equivalent basis, especially more than crude oil and NGLs, may lift cost and hurt earnings in both refining and midstream.
- The downcycle in chemicals may persist longer than expected, dragging returns for years to come.
- PSX's divestments may undershoot expectations and lead to a slower path to hitting debt targets.
- Unforeseen acquisitions may further shake market confidence in the outlook.
- The tariff conflict between the US and China may impact LPG and NGL exports.

MPC – Perennial Outperformer Looking for an Encore, Initiating at In Line, PT \$170

We are initiating coverage of Marathon Petroleum Corp (MPC) with an In Line rating at \$170/sh PT. A combination of well-timed portfolio moves and exposure to the refining cycle (not to mention the secular bull cycle underway for natural gas levered infrastructure to which MPCs ~63% ownership stake in MPLX is levered) have supported best in class shareholder returns and relative performance over the past 5 years. We see no change in MPCs strong commitment to shareholder returns (we see ~\$3 Bn sustainable buybacks or a ~9% yield in a midcycle refining environment) and combination of cost control and operational execution. Higher exposure to regional dynamics in the Mid-Continent and California (where MPC enjoys one of the advantaged asset positions in the industry) is likely frame refining performance (and market preference). A strong secular tailwind for energy infrastructure has supported valuation at MPLX where the sum of the parts implications for MPC are unambiguous and we see a well de-risked organic / inorganic growth trajectory here. Our in-line rating is in the context of recent outperformance (700 bps relative to sector YTD) and a balanced outlook across the MPC portfolio where we see likely too much optimism around California near-term and a view the re-rating of midstream in 2023/24 was more of a one time benefit to valuation.

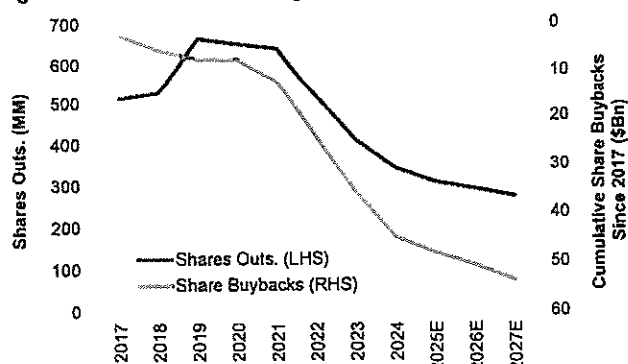
MPC was incorporated in Delaware in November 2009 in connection with the downstream / upstream split of heritage Marathon Oil Corp. What followed was a significant capital cycle in the domestic downstream and the build out of a best-in-class midstream business at MPLX. Portfolio change has been a consistent part of the MPC story, including MPLX's acquisition of MarkWest in 2015, the acquisition of Andeavor in 2018 and ultimately the divestment of Speedway in 2021. All were major transactions with transformational implications for the business.

Figure 112: MPC's EPS outpaced net income aided by buybacks



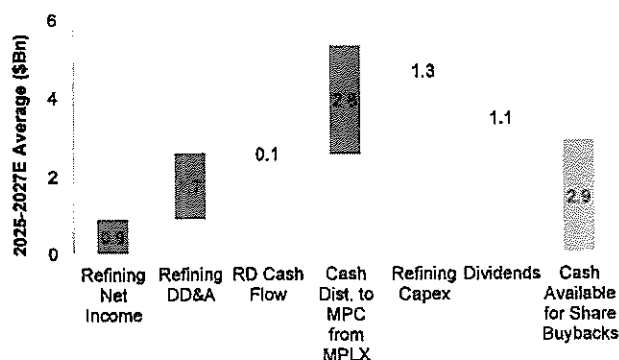
Source: Company Data, Evercore ISI Research

Figure 113: Shares outstanding cut in half from YE18 to YE24



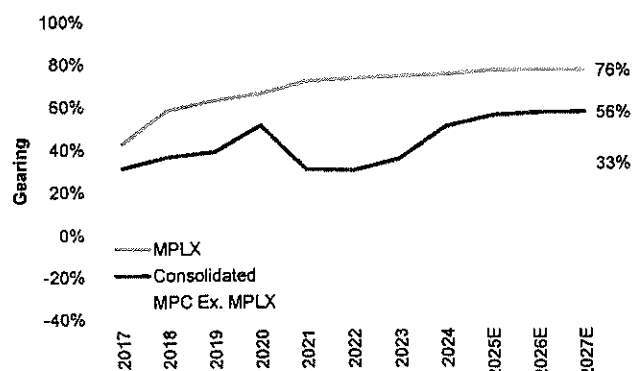
Source: Company Data, Evercore ISI Research

Figure 114: We model buyback rate of \$3 Bn per year during 2025-2027 as the MPLX distribution supports capex & dividends.



Source: Company Data, Evercore ISI Research

Figure 115: Gearing >30% for MPC excluding MPLX during 2025-2027E in our scenario



Note: Gearing defined as net debt ratio.

Source: Company Data, Evercore ISI Research

MPC outperformed peers significantly after an activist campaign advocated for the separation of retail & marketing from the refining / midstream focused core. A well-timed exit (Speedway was sold for \$21 Bn or 10x fwd EBITDA) facilitated a significant step up in shareholder distributions. MPC generated ~60% annual TSR over the last 5 years (2019/24) vs VLO at 36% and PSX at 30%. The refining cycle further flattered the return profile supported by asset sale proceeds leading to a ~50% reduction in the share count over the same time frame.

The return profile here can be attributed to a number of key factors: 1) \$21 Bn (\$16.5 Bn after-tax) proceeds from Speedway, 2) accretive organic and inorganic growth at MPLX (6.5% trailing 3-year CAGR), 2) structural cost reductions, 3) capital discipline and 5) a peer-leading commitment to shareholder returns.

The Earnings & Distributions Algorithm

The growth and maturity of MPLX (MPCs controlled midstream sub of which it owns a 63% LP interest) facilitates an interesting structural set up. Distributions from MPLX (of which \$2.5 Bn comes back to MPC) can support the entire dividend burden (\$1.1 Bn in 2025) and capex (\$1.3 Bn anticipated through cycle) for MPC on a standalone basis. This leaves excess returns from the refining business to support a buyback flywheel where shareholders will benefit in lockstep with the move in spreads (assuming continued operational execution). We believe this set up uniquely positions MPC shareholders to participate in refining upside / downside while insulating the capital needs of the business and the base dividend. Importantly, this distribution wedge from MPLX is anticipated to grow (our estimates reflect ~9% CAGR) to support dividend growth (further amplified if refining supports an acceleration of buybacks).

While the broader refining industry is operating in an ex-growth construct, the \$1.3 Bn of annual anticipated capex at MPC does support a number of growth initiatives under the surface. The 2025 capital spending outlook for example includes high return incremental investments at Los Angeles, Galveston Bay, and Robinson. Beyond maintenance capital that is required to maintain assets in good working order, there are always stand alone logistics or configuration projects in the refining industry that can capture unique to operator high returns from specific market trends. These types of projects should be anticipated and expected and to broadly remain within the total capex envelope.

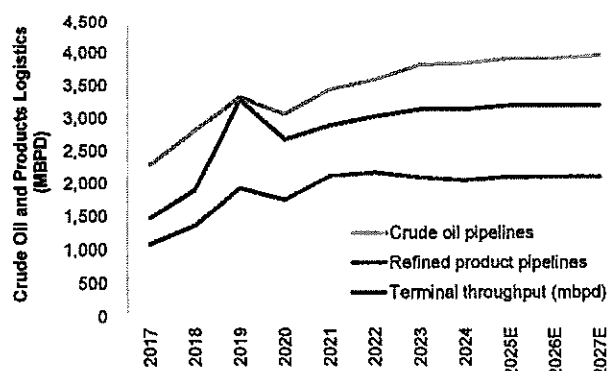
Steady Growth from Midstream

MPLX is a growth-oriented MLP formed by Marathon Petroleum in March 2012 and completed its IPO in October 2012. MPC owns the general partner (non-economic ownership) of MPLX and ~63% of the outstanding MPLX common units. Due to ownership of the general partner, MPC controls MPLX and therefore it consolidates MPLX and records a noncontrolling interest for the interest held by others.

MPLX's strategies are: 1) maintain safe and reliable operations, 2) grow stable cash flows while maintaining strict capital discipline, 3) focus on low-cost structure, 4) commitment to return capital to unitholders, and 5) commitment to sustainability.

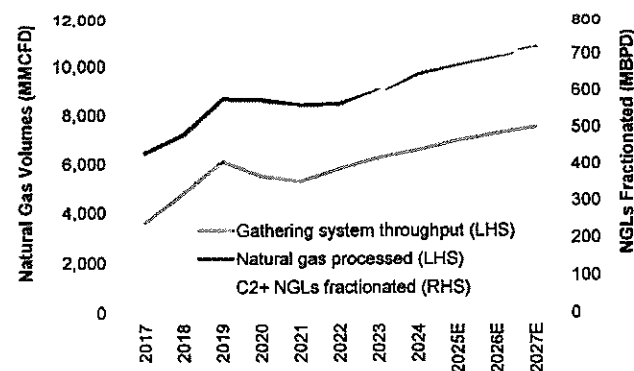
MPLX's commodity price risk is low. MPLX consists of two reportable segments: Crude Oil and Products Logistics Segment and Natural Gas and NGL Services Segment. EBITDA share from Crude Oil and Products Logistics Segment is around 2/3 of MPLX with revenue mainly from related parties (MPC). MPLX has various long-term, fee-based commercial agreements with MPC. Under these agreements, MPLX provides transportation, gathering, terminal, fuels distribution, marketing, storage, management, operational and other services to MPC. The remaining 1/3 of MPLX EBITDA is generated by Natural Gas and NGL Services Segment. The majority of revenues in this segment are generated from natural gas gathering, transportation and processing; and NGL transportation, fractionation, exchange, marketing and storage. MPLX enters into a variety of contract types including fee-based, percent-of-proceeds, keep-whole and purchase arrangements in order to generate revenues. MPLX's contract mix and exposure to natural gas and NGL prices may change as a result of changes in producer preferences, MPLX expansion in regions where some types of contracts are more common and other market factors. Commodity exposure is \$20 MM EBITDA for every \$0.05 change in NGL prices (annually) at YE2024.

Figure 116: Product volumes are stabilizing with flattening domestic demand, but crude oil and terminal volumes may continue to grow along with rising domestic supply



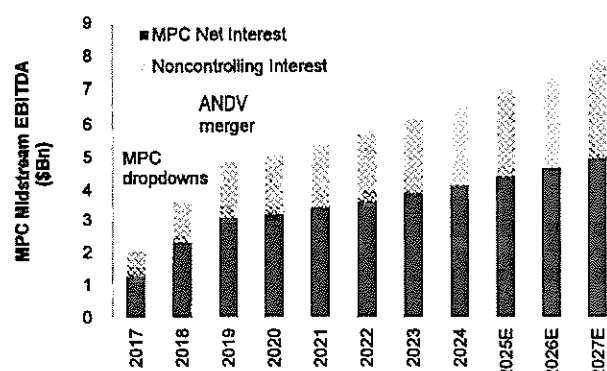
Source: Company Data, Evercore ISI Research

Figure 117: Gas and NGLs volumes should continue to grow



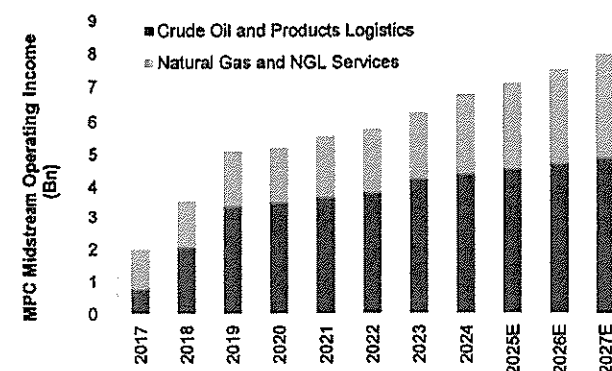
Source: Company Data, Evercore ISI Research

Figure 118: MPC's midstream EBITDA has grown (6-7%) during 2022-2024. Growth rate continues at 6-7% in 2025-2027 in our forecast



Source: Company Data, Evercore ISI Research

Figure 119: Robust growth from MPC's midstream driven by the momentum in gas infrastructure buildout as well as crude gathering in Permian and Bakken



Source: Company Data, Evercore ISI Research

MPLX continues to execute attractive growth opportunities focused on bringing in incremental third-party cash flows. MPLX continues to grow natural gas and NGL value chains, supporting our EBITDA growth forecast at 6-7% annually in 2025-2027.

- MPLX will build and operate the Gulf Coast fractionation complex consisting of two 150 MBPD fractionation facilities and a 400 MBPD LPG export terminal, all of which will be located adjacent to MPC's Galveston Bay refinery. MPLX's fully integrated NGL value chain connects the Permian to the Gulf Coast and will supply growing global demand for LPGs. The multiyear \$2.5 Bn investment in the fractionation complex and export terminal complements MPLX's existing asset base and leverages existing infrastructure. MPLX has entered into joint venture agreements with ONEOK for the export terminal and a bidirectional purity products pipeline between Mont Belvieu and Texas City. ONEOK will market its 200 MBPD and provide connectivity to Mont Belvieu storage, anticipated to enhance the competitiveness of the terminal. MPLX plans to market ethane production from the fracs to both existing and new customers. MPC plans to contract with MPLX to purchase the remaining LPG production (200 MBPD) from the fracs which MPC will market globally through its existing market businesses via the new export terminal. The fractionation facilities are expected to be in service in 2028 and 2029, and the export terminal is expected to be in service in early 2028.
- In 3Q24, MPLX acquired additional 20% interest in the BANGL pipeline, bringing its ownership to 45%. In 1Q25, MPLX announced the acquisition of the remaining 55% for \$715 MM. BANGL transports NGL from the Permian to Sweeny, TX and expanded capacity to 250 MBPD in 1Q25, then will further expand to 300 MBPD in 2H26. BANGL

enhances MPLX's Permian NGL value chain as part of its developing wellhead to water strategy.

- Blackcomb (MPLX net interest – 34%) is a 2.5 BCFD pipeline connecting supply in the Permian to domestic and export markets along the Gulf Coast. The Rio Bravo Pipeline Project (MPLX interest – 30.4%) is designed to transport up to 4.5 BCFD of natural gas from the Agua Dulce supply area to NextDecade's Rio Grande LNG project in Brownsville, Texas. Both Blackcomb and Rio Bravo natural gas pipeline are expected to be in service in 2H26.
- MPLX and its partners announced FID of the Traverse Pipeline, a bidirectional pipeline designed to transport 1.75 BCFD of natural gas along the Gulf Coast between Agua Dulce and the Katy area. The pipeline enhances optionality for shippers to access multiple premium markets, and is expected in service in 2H27.
- In the Permian, new plant Secretariat (0.2 BCFD) will bring MPLX gas processing capacity to 1.4 BCFD in 2H25. In the Northeast, with the addition of a new facility Hamon Creek III (0.3 BCFD), MPLX's gas processing capacity is expected to reach 8.1 BCFD and total fractionation capacity to 800 MBPD in 2H26.

MPLX expects to self-fund capital needs, with limited parent support. MPLX on net basis targets spending \$2.0 Bn in 2025, nearly double 2024 levels. Approximately 85% of the growth capital will be allocated to investments to grow MPLX's natural gas and NGL businesses in support of expected increased producer activity. MPLX is investing to expand the Permian to Gulf Coast integrated NGL value chain, progressing long haul pipeline projects and grow Permian and Marcellus processing capacity. MPLX anticipates mid-teen returns on its growth capital outlook (largely contractual), which should continue to extend the durability of the mid-single digit growth profile.

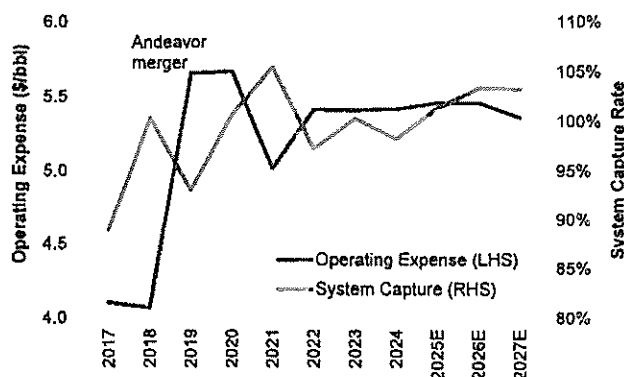
Refining Asset Mix Worth Watching

MPC owns and operates 13 refineries in three major regions: the Gulf Coast (42% of capacity), Mid-Continent (40%) and West Coast (18%) with an aggregate crude oil refining capacity of 2,960 MBPD. The post COVID period has flattered refining results (due to spreads) with some differentiation amongst operators in terms of execution. MPC has executed very well on an operating cost basis and been able to bring capital projects (although modest) online in a timely manner. MPC's operating costs per barrel declined by \$0.25/bbl from 2019 to 2024 in an inflationary environment.

Separating some of the one-off benefits refiners accrued during the post-COVID period (in addition to the Russia/Ukraine disruptions to the Atlantic basin products markets in 2022/23) from the go forward outlook can pose some analytical challenges.

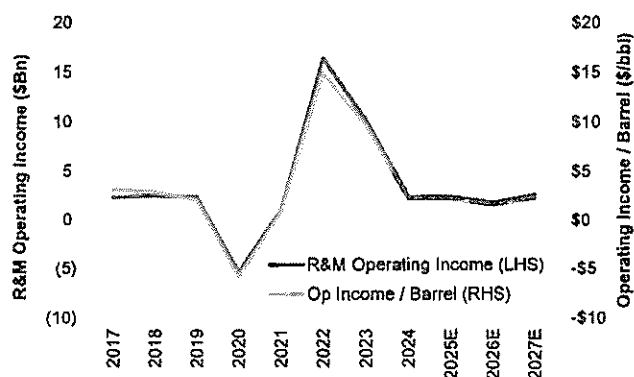
We expect its refining results in 2025-2027 to be close to 2024 levels reflecting a higher capture rate offset by lower margins in Mid-continent. MPC will continue to benefit from industry-leading capacity, increased complexity, feedstock advantage and higher exports of refined products. In California, renewable diesel expansion may continue to displace petroleum diesel demand in the West Coast over time, squeezing refining margins and portending refinery closures.

Figure 120: Strong evidence of cost control and capture rate



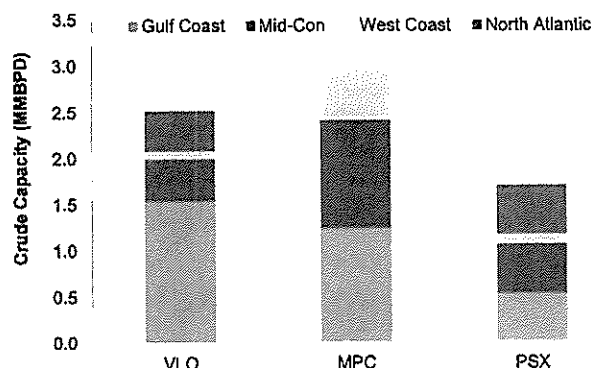
Source: Company Data, Evercore ISI Research

Figure 121: Little evidence of value leakage



Source: Company Data, Evercore ISI Research

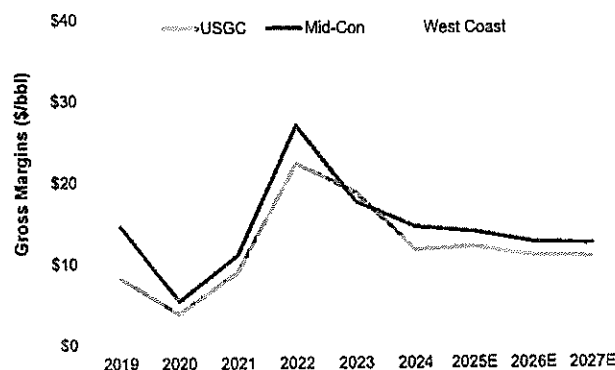
Figure 122: MPC has more exposure to the West Coast and Mid-Continent



Crude capacity post mid-2026.

Source: Company Data, Evercore ISI Research

Figure 123: We expect gross margins to normalize



Source: Company Data, Evercore ISI Research

Challenging Environment for Renewable Diesel

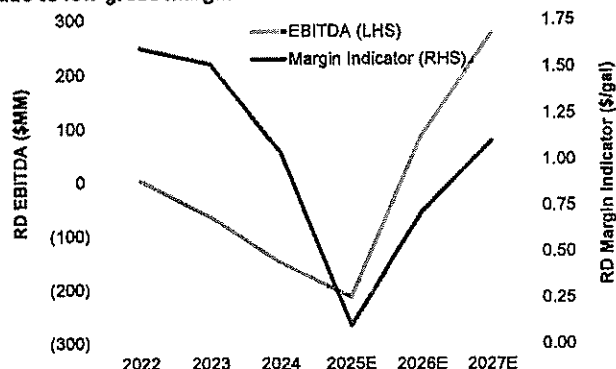
The Renewable diesel (RD) business at MPC was preciously buried in the refining segment results until more recently being broken out in a stand-alone segment. The segment includes the Martinez Renewable Fuels joint venture, Dickinson renewable fuels facility, Green Bison Soy Processing (MPC-25%), Beatrice Pretreatment and Cincinnati Aggregation.

The Martinez Renewable Fuels joint venture is a partnership structured as a 50/50 joint venture with Neste Corporation (ticker NESTE) to convert the Martinez facility from refining petroleum to refining renewable feedstocks. Martinez is a highly competitive facility per MPC with full capacity of 730 million gallons per year. MPC does not consolidate the Martinez Renewables business in financials, while a pro-rata portion of equity method investment depreciation and turnaround expense are added back to the RD segment adj. EBITDA.

The challenge for MPC (and others) in this business is to secure cost advantaged, high CI feedstocks with which to capture margins further supported by incentive markets. We expect the Renewable Diesel segment to remain under pressure in 2025 due to low gross margins despite higher utilization.

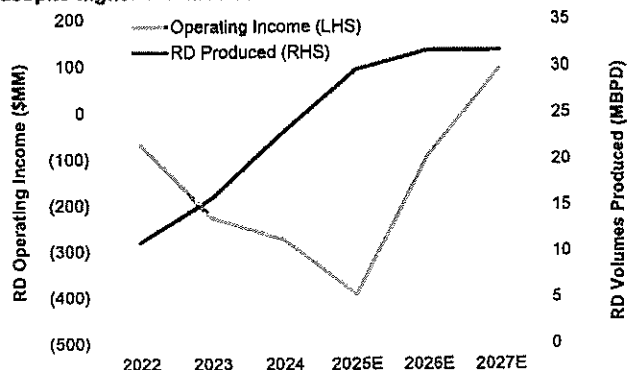
BTC to PTC transition starting January 2025 will hurt margins but RIN prices may increase to offset some impacts. In addition, the PTC program could potentially back out imports of renewable diesel. The economics remain challenging following the closure of several biodiesel plants.

Figure 124: Renewable Diesel segment EBITDA under pressure due to low gross margins



Source: Company Data, Evercore ISI Research

Figure 125: Renewable diesel may wait 2027 to turn profitable despite higher volumes/utilization



Source: Company Data, Evercore ISI Research

In Line Rating, PT \$170

Adjusted net income attributable to MPC shareholders in 2024 is similar to 2019 with \$1.5 Bn growth from Midstream offset the lost operating income of \$1.6 Bn from Speedway due to divestment. Since shares outstanding is cut in half, adjusted EPS easily doubles from \$4.82/shr in 2019 to \$9.36/shr in 2024. In our model, EPS is projected to increase modestly to ~\$9.5/shr in 2025, dip to ~\$9.4/shr in 2026 and then rebound to ~\$13.6/shr in 2027 reflecting refining margins fluctuations and higher margin capture rate in R&M, continuing growth in Midstream, loss-making renewable diesel, and mid-single-digit decline in shares outstanding due to steady buybacks.

After adjusting cash distribution to MPLX's public common units, levered FCF yield is projected to hold steady in the next three years: 7.1% in 2025, 6.9% in 2026 and 9.7% in 2027, or 7.9% on average. Shareholder return yield is estimated at 9.4%, 8.0% and 9.6% respectively, or 9.0% on average in 2025-2027.

Figure 126: Positive outlook on EPS, FCF, EBITDA, and CFPS

	2024	2025E	2026E	2027E
EPS	9.4	9.5	9.4	13.6
FCFPS	12.7	10.8	11.0	15.3
EBITDA	9,842	10,009	10,108	11,441
CFPS	20.1	20.9	22.4	27.5

Note: EBITDA is post turnaround.

Source: Company Data, Evercore ISI Research

Figure 127: Our \$170 PT reflects 2026 estimates times 8-year average (2017-2024) multiples.

	2025E	2026E	2027E	8Y Avg Multiple
P/E	\$155	\$153	\$221	16.3x
P/FCF	\$160	\$162	\$226	14.8x
EV/EBITDA	\$123	\$130	\$174	7.2x
P/CF	\$209	\$223	\$275	10.0x
Average	\$162	\$167	\$224	

Source: Company Data, Evercore ISI Research

Using historical valuation metrics, the table above illustrates MPC can support \$162/shr in 2025, \$167/shr in 2026 and \$224/shr in 2027. Using SOTP model, we arrive at a fair value of \$168/shr.

Figure 128: Fair value is near \$168/shr on SOTP model

	2025 EBITDA*	Multiple*	Value (\$MM)	\$/shr.
Sum of the Parts				
Refining & Marketing	4,062	8.5x	34,527	110
Midstream	6,988	10.0x	69,879	223
Renewable Diesel*	200	8.0x	1,600	5
Corporate	(792)	9.0x	(7,128)	(23)
Enterprise Value	10,458	9.5x	98,878	316
Debt - MPLX			(22,418)	(72)
Debt - MPC			(8,492)	(27)
Cash - MPLX			2,534	8
Cash - MPC			1,278	4
Pension			(638)	(2)
Net Debt (incl pension)			(27,736)	(89)
MPLX Common - Public			(18,611)	(59)
Equity Value			52,531	168

* EBITDA is post turnaround.

* Renewable diesel EBITDA is not for year 2025.

* Multiple is derived from figure 144 at the end of document.

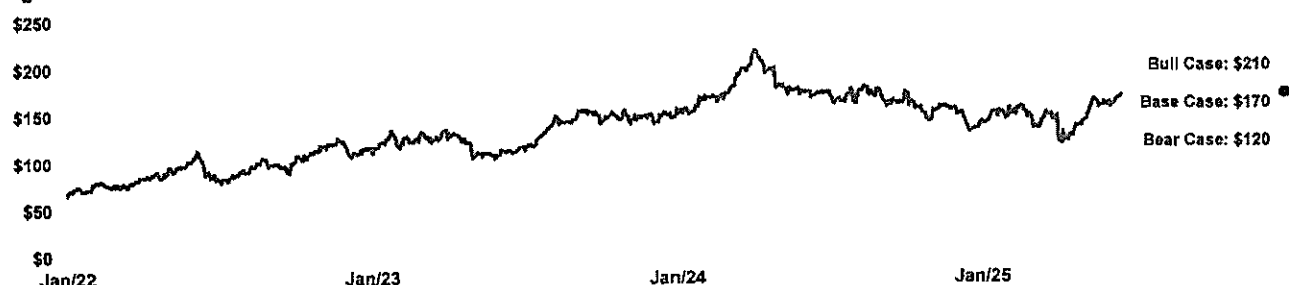
Source: Company Data, Evercore ISI Research

Marathon Petroleum (MPC)

In Line

\$170/shr PT

Figure 129: Bull / Base / Bear Outlook



Source: Company Data, Evercore ISI Research

Bull Case - \$210	Base Case - \$170	Bear Case - \$120
13x P/E multiple on \$16/shr EPS	14x P/E multiple on \$12/shr EPS	15x P/E multiple on \$8/shr EPS
Above-cycle environment. Sustained elevated cash flow support increased dividend growth and significant repurchases, as well as debt reduction. Accelerate investment in NGLs value chain in Midstream following wellhead to water strategy.	Executing on plan. Maintain capital discipline, steady cash flow, dividend growth and meaningful share buybacks through plan period. Midstream EBITDA grows at mid-single-digit annually via paced investment in NGLs value chain.	Unconstructive macro environment. Weaker refining environment erodes cash flow, earnings, balance sheet strength and shareholder returns. Dividends can grow with buybacks lower than expected. Midstream growth slows down.

Investment Thesis

MPC has outpaced peers over the past 5 years driven by a unique downstream / midstream asset configuration (via MPLX), solid execution through the post-COVID period of turnarounds and other market disruptions (delivering refining margins to the bottom line) and a well-timed (and priced) exit of the retail business which served to bolster shareholder returns. On a forward basis we see a sustainable and well risked outlook towards high single digit shareholder returns and growth. We see a 'last man standing' dynamic in California offering an outsized return opportunity for MPC (despite regulatory risks) and upside to 2H estimates from the Mid-Continent. Our investment view is colored by recent performance vs. the sector likely reflecting optimism surrounding California, and the tailwind afforded the re-rating at MPLX over the past 2-3 years.

Key Drivers

- MPC will maintain capital discipline through the cycle. We expect capital spending to approximate \$1.25 Bn on a standalone basis for many years to come. In addition to these multi-year investments at its Los Angeles, Galveston Bay and Robinson refineries, the company is executing shorter-term projects that offer high returns through margin enhancement and cost reduction.
- MPLX continues to execute attractive growth opportunities focused on bringing in incremental third-party cash flows. MPLX continues to grow natural gas and NGL value chains, supporting EBITDA growth at 6-7% annually in 2025-2027.
- Given MPC's highly advantaged refining business and the \$2.5 Bn annualized distribution from MPLX, we expect MPC's capital returns will stay attractive through all parts of the cycle.

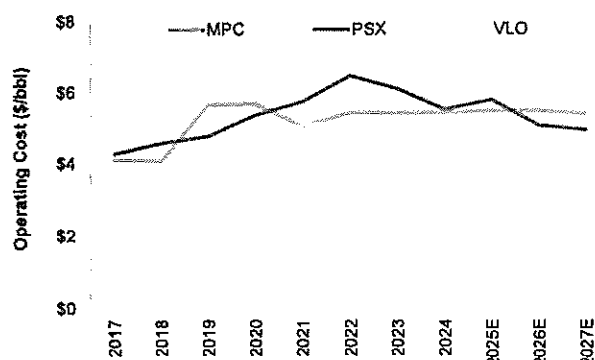
Risks

- Should oil market become oversupplied due to sluggish economic growth, accelerated growth in non-OPEC+ supply or changes in OPEC+, it could lead to price volatility, poor returns, and rising cost of capital.
- Near 12% of MPC's refining capacity is in California, which may be impacted by the possible capped margin in California. In addition, renewable diesel expansion may displace petroleum diesel demand in the West Coast over time, squeezing refining margins and portending refinery closures.
- Rising natural gas prices on a BTU equivalent basis, especially more than crude oil and NGLs, may lift cost and hurt earnings in both refining and midstream.
- Renewable diesel results depend on regulations from federal and California governments. Uncertainty stems from volatility in RIN, LCFS, and PTC pricing, which significantly influences margin visibility and investment decisions.

VLO – More than Placeholder, Cost & Focus Leader. In Line Rating, PT \$135

VLO's pure play refining portfolio + track record of delivery positions the stock as an expression of our view of the refining cycle. The market is likely to remain concerned over the duration of petroleum product demand in the face of efficiencies, electrification, and a continued focus on lower emissions. The combination of refining capacity rationalization and a higher cost of capital for industry participants (and a significant regulatory burden) will mean supply growth in West of Suez properly remain in check and potential undershoot demand which is likely more resilient than forecasts (or the market) suggest. As a result, we see well placed and world scale refining assets with access to advantaged feedstocks and end markets as well positioned to generate through cycle returns and capture volatility from supply or demand disruptions. VLO's pure play refining set up, best in class operational track record, sober view of portfolio management and through cycle investments all position the stock well in this environment.

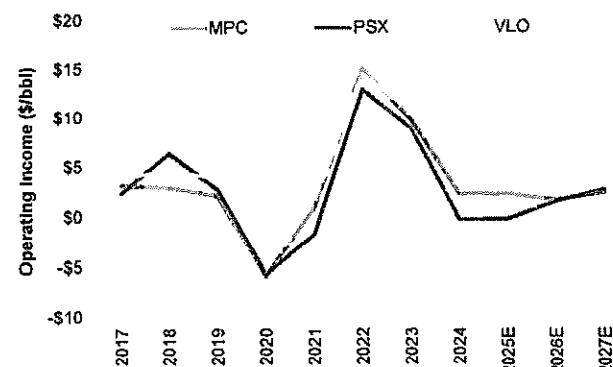
Figure 130: VLO's operating cost consistently below peers



Operating cost excludes turnaround costs. PSX's operating cost doesn't take into account of equity affiliates.

Source: Company Data, Evercore ISI Research

Figure 131: VLO's margin leads peers



Source: Company Data, Evercore ISI Research

In the immediate term, we believe the trough of 1H25 has proven more resilient (and higher for the refining names in our coverage) than anticipated, helping the stocks to find a bottom. We see a path to above consensus earnings for 2025 (7% upside potential) while our midcycle assumptions look to be modestly below the steady improvement the market assigns for 2026/27 (we are -29/-18% lower on EPS).

Valero is a leading competitor in the Refining, Ethanol and Renewable Diesel segments. The company seeks higher returns through selective investment, portfolio rationalization and cost productivity. The value proposition balances growth and return of capital to shareholders through dividends and share repurchases.

2025 capital spending is anticipated to be \$2 Bn, of which \$1.6 Bn is for sustaining the business and \$0.4 Bn is for growth projects. Valero is targeting a payout ratio of 40-50% of cash flow from operations adjusted for changes in working capital each year. For full year 2024, VLO returned \$4.3 Bn to stockholders in the form of dividends and buybacks, resulting in a payout ratio of 78%.

Net debt to capital ratio was 17%, below the target range of 20-30%.

Company Background

Valero was created by a spinoff from Coastal States Gas Corporation in 1980. Initially, it operated the natural gas operations of the LoVaca Gathering Company with refining operations commencing at Corpus Christi in 1984. Valero spun off the refinery and retail divisions into a separate company, which kept the Valero name in 1997. The natural gas operations were acquired by Pacific Gas and Electric (PG&E).

Starting in 1997, the company embarked on a decade-long growth strategy by acquisition phase. The program began with purchase of Basis Petroleum in 1997 which expanded the position in refining to 4 plants in Texas and Louisiana. In 1998, Valero acquired a refinery in Paulsboro, New Jersey from Mobil, prior to Mobil announcing its merger with Exxon in December 1998.

In 2000, Valero purchased ExxonMobil's Benicia, CA, refinery and retail interests in California. The next year, the company acquired R&M assets of Ultramar Diamond Shamrock, including its Quebec, ON, Ardmore, OK, Denver, CO, McKee, TX and Wilmington, CA refineries. It also attained ownership of Shamrock Logistics L.P. which was renamed Valero L.P. and was spun off as part of NuStar Energy in 2001.

Continuing the growth by acquisition strategy, Valero purchased Premcor for \$8 B in 2001 which included refineries at Delaware City, DE, Port Arthur, TX, Lima, OH and Memphis, TN. It became the largest U.S. refiner at that time. The company purchased its Aruba (2004), Meraux, LA (2009) and Pembroke, UK (2011) refineries from El Paso, Murphy, and Chevron, respectively.

In 2013, Valero separated its retail business by creating an independent public company named CST Brands, Inc. (CST). Comparing with MPC and PSX, VLO is relatively quiet in M&A activities over the last several years.

Low-Cost Supplier in Refining

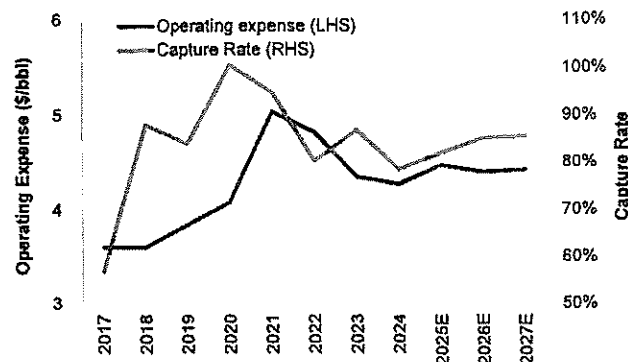
VLO's Refining segment, including Midstream and Marketing assets, represents 90% of company profits. Geographically, the position is segmented between Gulf Coast (61%, of capacity), Mid-Continent (18%), North Atlantic (17%) and West Coast (3%) post the closure of Benicia. Refining net crude capacity from 14 refineries approximates 2.5 MMBPD with wholesale marketing, product supply and distribution, and transportation operations present as well.

In Logistics, VLO seeks to increase access to cost-advantaged crudes and to increase capability to export refined products and crude oil. Key assets include: >3,000 miles of active pipelines, >130 MMBBLs of active shell capacity for crude and products, >200 truck rack bays, 5,200 railcars, >50 docks and two Panamax class vessels (JV).

In Marketing, VLO sells refined petroleum products in both the wholesale rack and bulk markets. The majority of rack volume is sold through unbranded channels. The remainder is sold to distributors and dealers that are members of the Valero family of brands that operate branded sites. These sites are independently owned and are supplied by VLO under multi-year contracts. Approximately 7,000 outlets carry the company's brand names: the Valero, Beacon, Diamond Shamrock, and Shamrock brands in the U.S., the Ultramar brand in Canada, the Valero and Texaco brands in the U.K. and Ireland, and the Valero brand in Mexico. VLO is growing a ratable global wholesale supply business through an extensive marketing network. Wholesale volumes approximate 1.5 MMBPD or 60% of VLO's light products production in 2024.

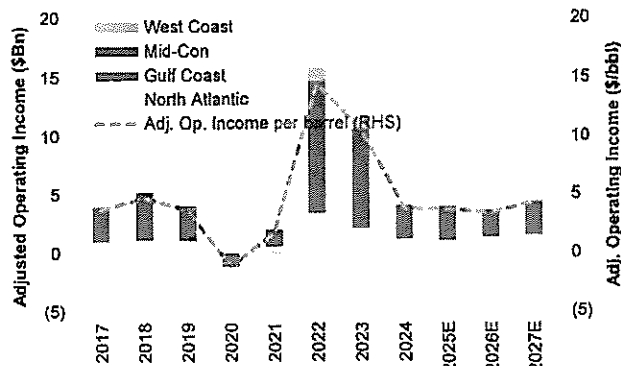
In the last decade or so, VLO increased distillate yields through new hydro-crackers at Port Arthur, TX, St. Charles, LA and Meraux, LA. Additionally, the company expanded access to domestic oil through two new crude topping units in Corpus Christi and Houston, and grew export capabilities. Two alkylation units at the Houston and St. Charles refineries upgraded low value isobutene and amylene into high value alkylate. An additional coker was added in Port Arthur refinery to improve heavy oil processing capability.

Figure 132: NG placing upward pressure on OPEX, offset by better capture rates



Operating expense excluding turnaround expense
Source: Company Data, Evercore ISI Research

Figure 133: Operating income normalizing after the refining margin spikes of 2022/23



Source: Company Data, Evercore ISI Research

VLO continues to pursue short-cycle, high-return optimization projects around its existing Refining assets. VLO is progressing with an FCC Unit optimization project at the St. Charles Refinery that will enable the refinery to increase the yield of high value products, including high-octane alkylate, enabling additional feedstocks to fill the alkylation capacity. The project is estimated to cost \$230 MM and is expected to be completed in 2026.

First-Mover Advantage in Renewable Diesel (RD) and Sustainable Aviation Fuels (SAF)

Diamond Green Diesel (DGD) is a 50/50 joint venture between VLO and Darling Ingredients (DAR, not rated). VLO operates DGD's renewable diesel plants and performs certain management functions for DGD thus VLO consolidates DGD's financial statements.

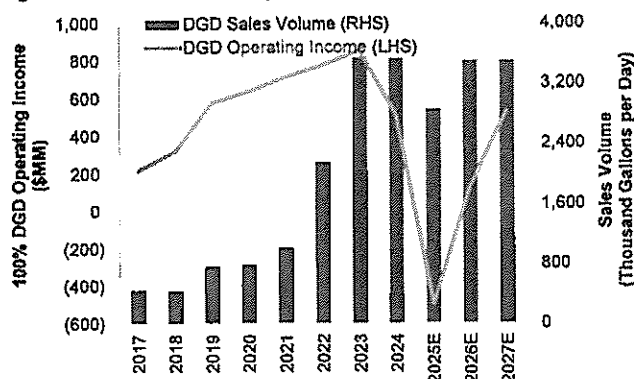
DGD owns two renewable diesel plants with the capacity to produce 1,170 million gallons per year of renewable diesel and 50 million gallons per year of renewable naphtha. The St. Charles Plant started in two phases in 2013 and 2021 with 700 million gallons per year of renewable diesel capacity, and the Port Arthur Plant started in 2022 with 470 million gallons per year of renewable diesel capacity. The DGD Plants have the capacity to process 100% waste and renewable feedstocks, which provides a margin advantage.

Both RINs and LCFS remain oversupplied, compressing margins in DGD in 2024-2026. BTC to PTC transition starting January 2025 will also reduce credits for DGD. However, diversifying to SAF may give VLO optionality for higher profits.

The Port Arthur SAF project was completed in 4Q24 and is now fully operational, providing the plant the optionality to upgrade ~50% of its current 470 million gallons of renewable diesel annual capacity to be blended to SAF.

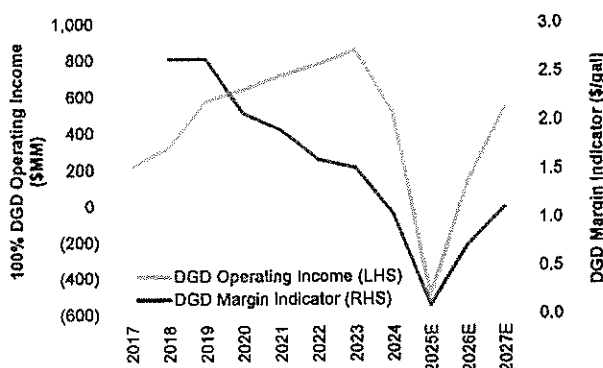
DGD is competitive due to its access to advantaged feedstocks (waste oils). DGD has both feedstock flexibility and can export products to foreign markets. The most attractive markets are in Europe and Canada compared to the US and California. Foreign UCO will no longer qualify for PTC however DGD's foreign UCO is and has always pointed at SAF in the Europe and UK. The 2% mandate in the EU and UK Sustainable Aviation Fuel (SAF) mandate requires that a minimum of 2% of jet fuel be sourced from sustainable sources. In addition, VLO has the flexibility to make either HVO or SAF into the European market depending on economic returns.

Figure 134: DGD operating income is industry leading enjoying high level of feedstock integration and a first-mover advantage



Source: Company Data, Evercore ISI Research

Figure 135: DGD margin indicators are expected to recover but remain below prior peak years



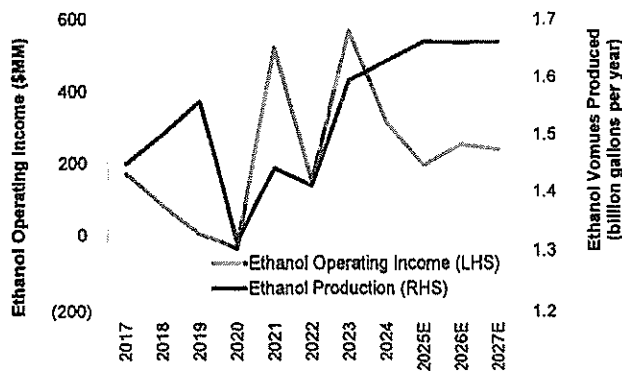
Source: Company Data, Evercore ISI Research

Modest Positive on Ethanol

The ethanol segment produces ethanol and distillers' grains from operations. The plants were astutely purchased for around \$0.8 B during a downturn in the renewable fuels market (2009-2010). Today, the company has 12 corn ethanol plants with production capacity near 110 MBPD (1.7 billion gallons per year).

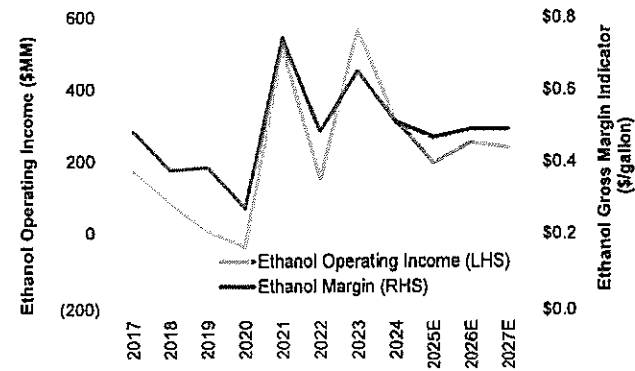
VLO is expected to be a shipper with eight ethanol plants connected to the Summit Carbon Solutions' carbon capture and storage project, representing approximately 1.1 billion gallons per year of ethanol production capacity, capturing ~3.1 million metric tons of CO₂ annually. This carbon capture project requires permits at the federal, state, and local levels thus operations may not proceed as expected in our view. VLO's ethanol margin may expand by \$0.25/gal assuming \$85 per metric ton 45Q tax credit. In addition, VLO is independently evaluating an Ethanol-to-Jet process that would convert ethanol from ethanol plants that have carbon sequestration capability to SAF.

Figure 136: Ethanol volumes fully recovered from pandemic disruptions



Source: Company Data, Evercore ISI Research

Figure 137: Ethanol operating income remain healthy in 2025-2027 on lower corn prices



Source: Company Data, Evercore ISI Research

In Line Rating, PT \$135

In our model, VLO's EPS estimates are resilient at ~\$7.9/shr in 2025, ~\$7.3/shr in 2026 and ~\$10.2/shr in 2027 reflecting refining margin fluctuations, margin improvement in both renewable diesel and ethanol, as well as low-single-decline in shares outstanding due to buybacks.

Adjusted levered FCF yield is projected at 6.2% in 2025, 6.1% in 2026 and 7.8% in 2027, or 6.7% on average. Shareholder return yield is estimated at 6.1%, 6.2% and 6.9% respectively, or 6.4% on average in 2025-2027.

Figure 138: Fair value is near \$140/shr on SOTP model

Sum of the Parts	2025E EBITDA*	Multiple*	Value (\$MM)	\$/shr.
Refining	5,594	8.5x	47,547	151
Renewable Diesel*	300	8.0x	2,400	8
Ethanol	276	8.0x	2,207	7
Corporate	(540)	8.5x	(4,590)	(15)
Enterprise Value	5,630	8.4x	47,565	151
Debt - excluding VIEs			(8,482)	(27)
Cash - excluding VIEs			4,634	15
Pension			228	1
Net Debt (incl pension)			(3,620)	(12)
Equity Value			43,945	140

* EBITDA is post turnaround.

* Renewable diesel EBITDA is not for year 2025 and reflects 50% interest.

* Multiple is derived from figure 144 at the end of document.

Source: Company Data, Evercore ISI Research

Using historical valuation metrics, the table below illustrates VLO can support \$128/shr in 2025-2026 and \$159/shr in 2027. Using SOTP model, we arrive fair value of \$140/shr.

Figure 139: Positive outlook on EPS, FCF, EBITDA, and CFPS

	2024	2025E	2026E	2027E
EPS	8.3	7.9	7.3	10.2
FCFPS	10.7	9.7	9.6	12.3
EBITDA	7,028	6,147	6,243	7,404
CFPS	17.1	16.5	16.4	19.5

Note: EBITDA is pre-tumaround.

2025 and 2026 EPS are adjusted higher to remove the impacts of accelerated DD&A due to Benicia refinery.

Source: Company Data, Evercore ISI Research

Figure 140: Our \$135 PT reflects 2025-2026 estimates times 8-year average (2017-2024) multiples.

	2025E	2026E	2027E	8Y Avg Multiple
P/E	\$124	\$114	\$160	15.6x
P/FCF	\$147	\$146	\$187	15.2x
EV/EBITDA	\$106	\$114	\$150	7.5x
P/CF	\$150	\$148	\$176	9.1x
Average	\$128	\$128	\$159	

Source: Company Data, Evercore ISI Research

Valero (VLO)**In Line****\$135/shr PT****Figure 141: Bull / Base / Bear Outlook**

Source: Company Data, Evercore ISI Research

Bull Case - \$170	Base Case - \$135	Bear Case - \$90
13x P/E multiple on \$13/shr EPS	14x P/E multiple on \$9.5/shr EPS	15x P/E multiple on \$6/shr EPS
Above-cycle environment. Sustained elevated cash flow support increased dividend growth and significant repurchases, as well as debt reduction. Renewable diesel and ethanol operating income gradually improve.	Executing on plan. Maintain capital discipline, steady cash flow, dividend growth and meaningful share buybacks through plan period. Renewable diesel and ethanol operating income gradually improve.	Unconstructive macro environment. Weaker refining environment erodes cash flow, earnings, balance sheet strength and shareholder returns. Dividends can grow with buybacks lower than expected. Renewable diesel and ethanol results drag.

Investment Thesis

We see fears around falling petroleum product demand particularly in the OECD as overblown and expect a longer duration demand horizon for transportation fuels than regulatory frameworks, electrification efforts, or net zero ambitions suggest. Further we see supply side rationalization of marginal refining assets continuing particularly in the OECD. This should leave VLO with both advantaged assets (feedstock and market access) but also advantaged cost (regulatory burden, utilities) vs. peers. We have a lot of respect for the track record of delivery and strategic positioning at VLO, and while there are some potential positives on the horizon (widening light/heavy, return of Russian barrel to the Atlantic basin) the stock has outperformed as refining margins and expectations bottomed in early 2Q. A better entry point is likely as expectations shift and VLO's long term positioning and value proposition remain unchanged.

Key Drivers

- As a cost leader among peers, Valero would be able to weather through margin volatilities through the cycle. VLO has the lowest cash operating cost among peer group while maintaining top quartile operating performance.
- DGD is competitive due to its access to advantaged feedstocks (waste oils). Port Arthur SAF project provides the plant the optionality to upgrade ~50% renewable diesel to SAF.
- VLO continues to pursue short-cycle, high-return optimization projects around its existing Refining assets.
- Disciplined capital allocation delivering peer leading free cash flow yield and returns to stockholders across margin cycles.

Risks

- Should oil market become oversupplied due to sluggish economic growth, accelerated growth in non-OPEC+ supply or changes in OPEC+, it could lead to price volatility, poor returns, and rising cost of capital.
- Rising natural gas prices, especially more than crude oil, may lift cost and hurt earnings in refining.
- Cost escalation and global inflation pressures could negatively affect earnings and cash flows, eroding shareholder returns.
- Renewable diesel results depend on regulations from federal and California governments. Uncertainty stems from volatility in RIN, LCFS, and PTC pricing, which significantly influences margin visibility and investment decisions.

Figure 143: Energy Sector Cash Return Yields // EVR ISI Price Deck

Evercore ISI Energy Sector Comp Sheet

Total Cash Return Yield (ISI Price Deck)

Date: 6/17/2025

Ticker	Unlevered FCF Yield (%)			Base Dividend Yield			Variable Dividend Yield			Total Dividend Yield (Base + Variable)			Buyback Yield			Total Cash Return Yield (Dividends + Buyback)		
	2025	2026	2027	2025	2026	2027	2025	2026	2027	2025	2026	2027	2025	2026	2027	2025	2026	2027
Integrated Oil																		
ExxonMobil	4.3%	6.1%	8.6%	3.5%	3.7%	3.9%	--	--	--	3.5%	3.7%	3.9%	4.0%	4.2%	4.4%	7.5%	7.9%	8.3%
Shell	6.3%	7.1%	10.0%	4.0%	4.1%	4.3%	--	--	--	4.0%	4.1%	4.3%	5.1%	4.7%	5.3%	9.1%	8.8%	9.6%
BP	6.7%	8.2%	10.6%	6.2%	6.4%	6.7%	--	--	--	6.2%	6.4%	6.7%	6.6%	4.6%	6.7%	12.8%	11.1%	13.4%
Average	5.8%	7.1%	9.7%	4.5%	4.8%	5.0%	--	--	--	4.6%	4.8%	5.0%	5.2%	4.5%	5.5%	9.8%	9.3%	10.4%
Exploration & Production																		
ConocoPhillips	3.3%	6.5%	9.0%	3.3%	3.5%	3.7%	--	--	--	3.3%	3.5%	3.7%	3.0%	3.5%	3.5%	6.3%	7.0%	9.0%
Canadian Nat. Res.	6.4%	8.9%	11.9%	5.0%	5.4%	5.8%	--	--	--	5.0%	5.4%	5.8%	0.9%	2.5%	5.5%	5.9%	8.0%	11.3%
EOG Resources	4.5%	7.5%	9.8%	3.1%	3.2%	3.3%	--	--	--	3.1%	3.2%	3.3%	2.8%	4.1%	6.4%	5.9%	7.3%	9.7%
Occidental Petroleum	5.4%	11.1%	14.6%	2.1%	2.2%	2.2%	--	--	--	2.1%	2.2%	2.2%	--	--	--	2.1%	2.2%	2.2%
EQT Corp.	4.4%	6.1%	7.3%	1.2%	1.2%	1.2%	--	--	--	1.2%	1.2%	1.2%	--	1.7%	1.5%	1.2%	2.9%	2.7%
Devon Energy	7.5%	13.0%	17.5%	2.8%	3.0%	3.2%	--	--	--	2.8%	3.0%	3.2%	4.8%	6.4%	9.2%	7.5%	9.4%	12.4%
Diamondback Energy	7.6%	10.7%	12.6%	2.6%	2.7%	2.7%	--	--	--	2.6%	2.7%	2.7%	4.4%	3.5%	3.9%	7.0%	6.2%	6.6%
APA Corp.	6.9%	6.8%	8.3%	4.8%	4.8%	4.8%	--	--	--	4.8%	4.8%	4.8%	1.3%	0.0%	--	6.1%	4.8%	4.8%
Average	5.8%	8.8%	11.4%	3.1%	3.2%	3.4%	--	--	--	3.1%	3.2%	3.4%	2.1%	2.7%	4.0%	5.3%	6.0%	7.4%
Median	5.9%	8.2%	10.9%	2.9%	3.1%	3.3%	--	--	--	2.9%	3.1%	3.3%	2.1%	3.1%	4.5%	6.0%	6.6%	7.8%
Oilfield Services																		
SLB	6.6%	6.4%	N/A	3.2%	3.2%	N/A	--	--	--	3.2%	3.2%	N/A	4.6%	4.6%	N/A	7.8%	7.8%	N/A
Baker Hughes	5.2%	5.3%	N/A	2.3%	2.3%	N/A	--	--	--	2.3%	2.3%	N/A	1.9%	1.7%	N/A	4.3%	4.0%	N/A
Halliburton	8.5%	11.2%	N/A	3.0%	3.0%	N/A	--	--	--	3.0%	3.0%	N/A	5.1%	4.7%	N/A	8.0%	7.7%	N/A
Average	6.7%	7.6%	N/A	2.8%	2.8%	N/A	--	--	--	2.8%	2.8%	N/A	3.9%	3.7%	N/A	6.7%	6.5%	N/A
Refining & Marketing																		
Marathon Petroleum	5.9%	5.0%	6.4%	2.2%	2.3%	2.4%	--	--	--	2.2%	2.3%	2.4%	6.3%	5.2%	6.6%	8.5%	7.4%	9.0%
Phillips 66	4.5%	5.5%	7.4%	3.8%	4.0%	4.1%	--	--	--	3.8%	4.0%	4.1%	1.8%	1.2%	2.2%	5.6%	5.2%	6.3%
Valero	6.6%	6.5%	8.2%	3.2%	3.4%	3.5%	--	--	--	3.2%	3.4%	3.5%	3.5%	3.5%	4.1%	6.7%	6.8%	7.6%
Average	5.6%	5.7%	7.3%	3.1%	3.2%	3.3%	--	--	--	3.1%	3.2%	3.3%	3.9%	3.3%	4.3%	6.9%	6.5%	7.7%

Note: BKV figures represent Upstream and Midstream business only, and exclude CCUS.

Note: CVX and HES not shown above due to suspended coverage relating to various legal, regulatory, and/or policy circumstances

Source: Company Data, Evercore ISI Research

Figure 144: Refining Sub-Sector Comp Sheet

Date: 6/17/2025

	Ticker	Rating	Current Price	Price Target	% Upside	Mkt Cap (\$Bn)	Adj. EV (\$Bn)	EV/EBITDA		EV/DACF		FCF Yield		P/E		2025 Div Yld				
								2025	2026	2025	2026	2025	2026	2025	2026					
Refining & Marketing - EVR ISI Estimates																				
Marathon Petroleum	MPC	In Line	\$170.08	\$170	0%	\$87	\$87	8.5x	8.3x	7.0x	9.4x	9.0x	7.7x	7.7%	6.4%	9.0%	17.9x	18.1x	12.5x	2.3%
Phillips 66	PSX	Outperform	\$124.54	\$130	4%	\$69	\$69	9.4x	8.2x	6.7x	13.2x	11.7x	9.5x	4.5%	5.8%	8.3%	26.1x	14.8x	10.9x	4.0%
Valero	VLO	In Line	\$141.77	\$135	-5%	\$44	\$53	10.3x	9.7x	7.5x	9.2x	9.2x	7.8x	6.8%	6.8%	8.7%	19.8x	20.1x	13.9x	3.4%
Average - EVR ISI Estimates								9.4x	8.7x	7.1x	10.6x	10.0x	8.3x	6.3%	6.3%	8.7%	21.3x	17.7x	12.4x	3.2%
Refining & Marketing - Consensus																				
HF Sinclair	DNO		\$41.67			\$8	\$10	7.2x	6.0x	5.6x	11.8x	8.3x	7.3x	-1.5%	7.6%	6.4%	21.8x	13.2x	10.4x	4.8%
PBF Energy	PBF		\$24.39			\$2.8	\$5.6	NM	6.0x	5.5x	NM	5.8x	5.3x	-21.0%	7.1%	13.5%	NM	31.9x	14.4x	4.4%
CVR Energy	CVI		\$28.28			\$2.8	\$4.3	11.4x	6.8x	7.1x	13.7x	6.6x	6.6x	-0.3%	18.4%	13.2%	NM	21.3x	24.1x	7.1%
Delek	DK		\$22.77			\$1.4	\$4.1	10.1x	7.0x	6.8x	10.0x	6.4x	5.8x	-10.5%	8.6%	-1.2%	NM	NM	NM	4.5%
Average - Consensus								9.6x	6.5x	6.3x	11.8x	6.8x	6.2x	-8.3%	10.4%	8.0%	21.8x	22.1x	16.3x	5.2%
MPLXs																				
MPLX	MPLX		\$51.45			\$53	\$74	10.3x	9.8x	9.3x	11.2x	10.1x	9.7x	7.1%	8.7%	10.2%	11.4x	10.6x	10.0x	7.2%
Enterprise Products	EPD		\$31.23			\$68	\$100	9.8x	9.3x	9.0x	10.0x	9.8x	9.5x	6.2%	9.5%	10.3%	11.2x	10.4x	9.9x	6.7%
Energy Transfer	ET		\$17.93			\$62	\$136	8.4x	8.1x	7.8x	9.9x	9.1x	8.7x	7.2%	9.7%	12.3%	12.4x	11.5x	10.9x	7.1%
Western Midstream	WES		\$38.42			\$15	\$22	9.0x	8.7x	8.3x	9.1x	8.8x	8.6x	9.6%	9.0%	11.5%	11.4x	10.6x	9.8x	11.4%
Plains All American	PAA		\$17.74			\$13	\$27	9.3x	9.4x	9.1x	8.7x	8.9x	8.6x	11.4%	11.5%	13.5%	11.0x	11.7x	11.2x	7.7%
Average - Consensus								9.5x	9.1x	8.7x	10.4x	9.7x	9.3x	6.8%	9.3%	10.9%	11.7x	10.8x	10.3x	7.0%
Other Corps																				
Williams	WMB		\$58.50			\$72	\$102	13.1x	12.2x	11.3x	14.9x	13.8x	13.1x	3.1%	3.7%	4.6%	27.0x	24.1x	21.4x	3.3%
ONEOK	ONEK		\$91.36			\$51	\$84	10.2x	9.5x	9.0x	11.2x	10.1x	10.4x	7.0%	9.2%	9.6%	15.1x	13.2x	11.9x	4.9%
Kinder Morgan	KMI		\$27.47			\$51	\$96	11.4x	11.0x	10.5x	12.9x	12.7x	12.2x	4.6%	5.0%	4.5%	21.6x	20.2x	18.8x	4.2%
Targa Resources	TRGP		\$169.65			\$37	\$53	11.1x	10.2x	9.4x	12.2x	11.2x	10.9x	1.8%	4.3%	6.3%	22.9x	18.4x	15.8x	1.9%
Average - Consensus								11.6x	10.9x	10.3x	13.0x	12.2x	11.9x	4.9%	6.0%	6.3%	21.2x	19.1x	17.3x	4.1%
Convenience Stores																				
Murphy	MUSA		\$399.93			\$8	\$10	10.4x	9.6x	8.9x	12.7x	11.8x	11.2x	3.8%	4.3%	4.6%	16.7x	14.4x	13.0x	0.5%
Casey's	CASY		\$507.63			\$19	\$22	16.1x	14.8x	13.7x	21.3x	17.3x	16.5x	2.6%	3.1%	3.6%	32.1x	28.4x	26.0x	0.4%
Alimentation Couche-Tard	ATD-TSE		\$72.01			\$68	\$86	10.0x	9.4x	9.2x	12.1x	12.0x	11.3x	5.6%	5.2%	5.6%	17.8x	15.8x	16.1x	1.0%
Average - Consensus								12.2x	11.2x	10.6x	15.4x	13.7x	13.0x	4.0%	4.2%	4.6%	22.2x	19.6x	18.4x	0.6%
Petrochemicals																				
LyondellBasell	LYB		\$59.59			\$19	\$30	9.3x	7.5x	6.3x	11.0x	8.4x	6.9x	3.5%	6.6%	10.4%	15.9x	10.4x	8.0x	8.8%
Dow	DOW		\$29.44			\$21	\$38	9.2x	7.4x	6.5x	9.6x	9.3x	7.8x	3.7%	4.2%	6.5%	89.1x	22.9x	15.0x	9.4%
Westlake	WLK		\$73.24			\$9	\$13	8.2x	6.5x	5.7x	10.2x	8.0x	7.1x	3.4%	5.4%	7.3%	62.4x	17.6x	11.1x	2.9%
Average - Consensus								8.9x	7.1x	6.2x	10.3x	8.6x	7.3x	3.5%	5.4%	8.1%	55.8x	17.0x	11.4x	7.1%
Biorefiners																				
Darling	DAR		\$38.64			\$5.2	\$10.3	9.0x	7.1x	6.9x	11.1x	11.5x	9.9x	7.8%	5.8%	9.9%	24.2x	11.2x	10.1x	0.0%
Clean Energy Fuels	CLNE		\$1.96			\$0.4	\$0.6	10.9x	8.1x	5.2x	10.6x	7.4x	5.5x	-17.2%	-13.8%	-13.8%	NM	NM	NM	0.0%
Green Plains	GPRE		\$5.78			\$0.4	\$0.9	30.5x	7.1x	4.4x	20.4x	7.7x	6.8x	-22.1%	0.4%	5.3%	NM	NM	3.4x	0.0%
Average - Consensus								16.8x	7.4x	5.5x	14.0x	8.8x	7.4x	-10.5%	-2.5%	0.5%	24.2x	11.2x	6.7x	0.0%

LO's EBITDA is adjusted to post-turnaround, thus comparable with MPC and PSX.

MPC's FCF yield deducts cash distribution to MPLX's public common units in EVR ISI estimates.

EV = market cap + net debt + non-controlling interest. For MPC, non-controlling interest = public common units of MPLX.

Source: Company Data, FactSet, Evercore ISI Research

VLO's EBITDA is adjusted to post-tumaround, thus comparable with MPC and PSX.

MPC's FCF yield deducts cash distribution to MPLX's public common units in EVR ISI estimates.

EV = market cap + net debt + non-controlling interest. For MPC, non-controlling interest = public common units of MPLX.

Source: Company Data, FactSet, Evercore ISI Research

TIMESTAMP

(Article 3(1)e and Article 7 of MAR)

Time of dissemination: June 17 2025 8:12 PM ET

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Outperform- the total forecasted return is expected to be greater than the expected total return of the analyst's coverage sector.

In Line- the total forecasted return is expected to be in line with the expected total return of the analyst's coverage sector.

Underperform- the total forecasted return is expected to be less than the expected total return of the analyst's coverage sector.

Coverage Suspended- the rating and target price have been removed pursuant to Evercore ISI policy when Evercore is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances.*

Rating Suspended- Evercore ISI has suspended the rating and target price for this stock because there is not sufficient fundamental basis for determining, or there are legal, regulatory or policy constraints around publishing, a rating or target price. The previous rating and target price, if any, are no longer in effect for this company and should not be relied upon.*

*Prior to October 10, 2015, the "Coverage Suspended" and "Rating Suspended" categories were included in the category "Suspended."

FINRA requires that members who use a ratings system with terms other than "Buy," "Hold/Neutral" and "Sell" to equate their own ratings to these categories. For this purpose, and in the Evercore ISI ratings distribution below, our Outperform, In Line, and Underperform ratings can be equated to Buy, Hold and Sell, respectively.

Evercore ISI rating (as of 06/17/2025)

Coverage Universe

Ratings	Count	Pct.
Buy	439	58
Hold	277	37
Sell	14	2
Coverage Suspended	16	2
Rating Suspended	7	1

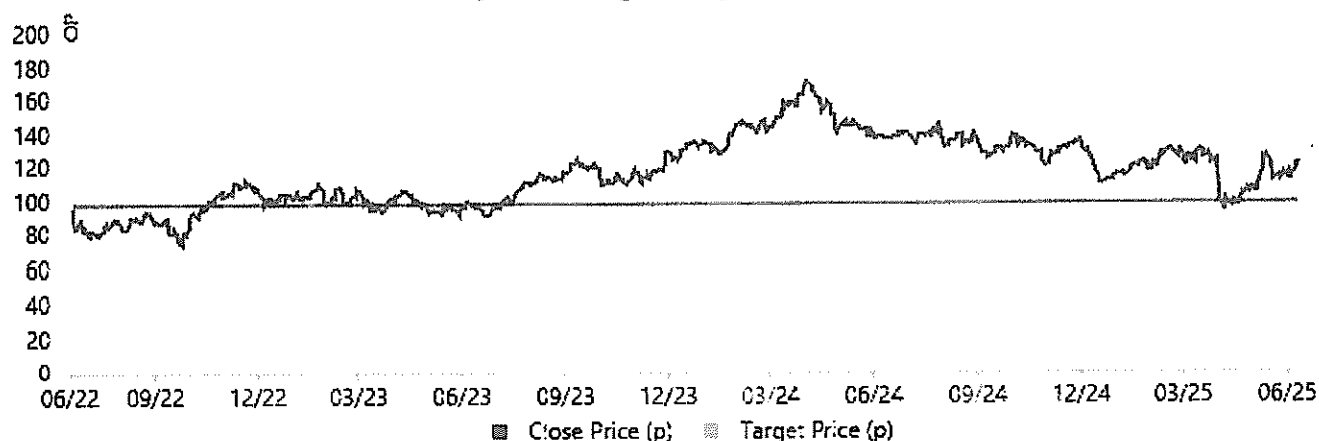
Investment Banking Services | Past 12 Months

Ratings	Count	Pct.
Buy	58	13
Hold	21	8
Sell	1	7
Coverage Suspended	2	13
Rating Suspended	2	29

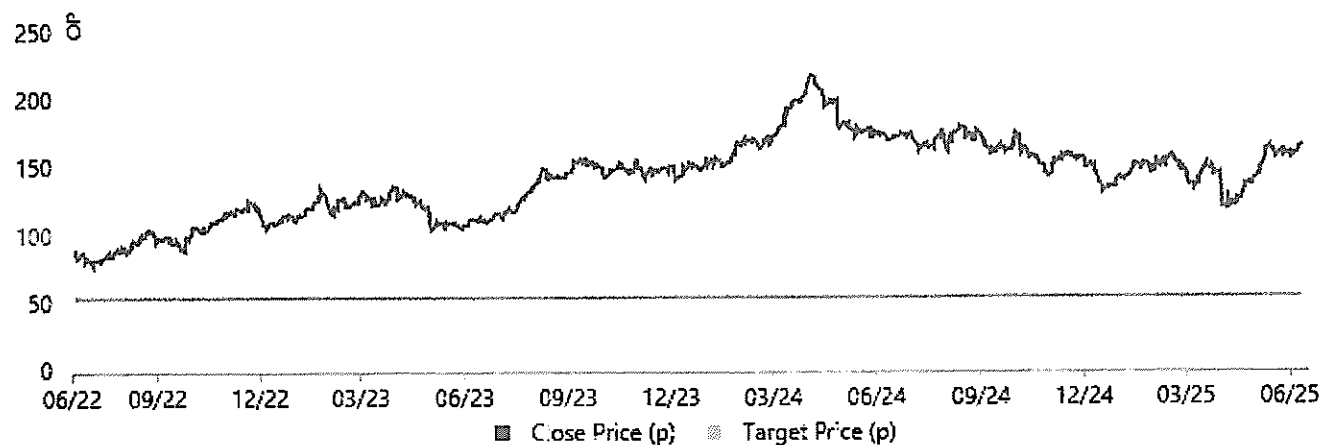
Issuer-Specific Disclosures (as of June 17, 2025)

Price Charts

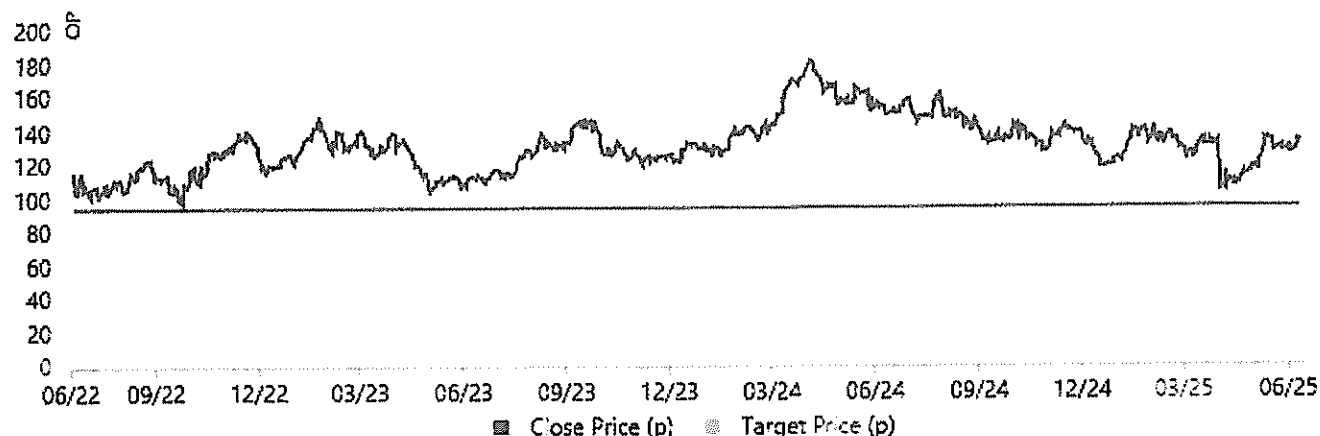
Phillips 66 Rating History as of 06/17/2025



Marathon Petroleum Corp. Rating History as of 06/17/2025



Valero Energy Corp Rating History as of 06/17/2025



Ratings Key

B Buy	OP Outperform	L Long	CS Coverage Suspended
H Hold	IL In Line	NP No Position	RS Rating Suspended
S Sell	UP Underperform	S Short	

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Weisenburger Exhibits 7–20

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Exhibit 21



June 25, 2025

Via E-Mail

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Dear Sirs:

**RE: REVISED TOPPING PROPOSAL FOR PURCHASE OF 100% SHARES OF PDV
HOLDING INC. ("PDVH")**

This letter sets out the revised terms of the definitive and binding proposal (the "**Revised Topping Proposal**") by Dalinar Energy Corporation ("**Dalinar Energy**" or the "**Purchaser**"), a wholly-owned subsidiary of Gold Reserve Ltd., f/k/a Gold Reserve Inc.¹ ("**Gold Reserve**"), to purchase 100% of the common shares of PDVH for a net purchase price of **\$7.530 billion** (the "**Net Purchase Price**").² The Revised Topping Proposal is supported by Attached Judgment Holders Rusoro Mining Limited ("**Rusoro**"), Koch Minerals SARL and Koch Nitrogen International SARL (collectively, "**Koch**"), and XYQ US, LLC ("**XYQ**"), which controls the Attached Judgment held by Siemens Energy Inc. (the "**Siemens Judgment**").

¹ On September 30, 2024, Gold Reserve Inc. completed a continuance and re-domiciled from Alberta, Canada to Bermuda, and in connection therewith changed its name to Gold Reserve Ltd.

² The Net Purchase Price is net of the Advanced Transaction Expenses, the Closing Transaction Expenses, and the Expense Reserve Holdback Amount, as those terms are defined in the SPA.

This Revised Topping Proposal amends and replaces the Topping Proposal previously submitted by the Purchaser on June 18, 2025 and the Topping Proposal submitted earlier today, on June 25, 2025. The Purchaser further reserves the right to amend and further improve the terms of the Revised Topping Proposal as appropriate.

Summary of the Revised Topping Proposal

- The Net Purchase Price will fully satisfy, in cash delivered at Closing of the Sale Transaction in the amount of **\$3.925 billion**, the Attached Judgments of the following Attached Judgment Holders, listed in the priority order established by the Court: Crystallex International Corp. (“**Crystallex**”); Tidewater Investment SRL and Tidewater Caribe S.A. (collectively, “**Tidewater**”); ConocoPhillips Gulf Paria B.V., *et al.* (Judgments #1 and #2) (collectively, “**ConocoPhillips**”); OI European Group B.V. (“**OIEG**”); Northrop Grumman Ship Systems, Inc./Huntington Ingalls (“**Huntington Ingalls**”); ACL1 Investments Ltd., ACL2 Investments Ltd., and LDO (Cayman) XVIII Ltd. (collectively, “**ACL1**”); and Red Tree Investments, LLC (“**Red Tree**”).
- The Net Purchase Price will also satisfy, through the exchange of equity securities of Dalinar Energy, a further **\$3.605 billion** in Attached Judgments as follows: the Attached Judgment of Rusoro in full, the Attached Judgment of Koch in full, the Attached Judgment of Gold Reserve in full, and the Siemens Judgment in full.
- The Revised Topping Proposal is supported by fully committed debt financing up to **\$6.5 billion**, of which **\$4.85 billion** will be available at Closing, with an additional **\$1.65 billion** in asset-based lending available post-Closing. The certainty of the debt financing is evidenced by the annexed Commitment Letters executed by JP Morgan Chase Bank, N.A. (“**JP Morgan**”), The Toronto-Dominion Bank, New York Branch (“**TD Bank**”), and TD Securities (USA) LLC (“**TDS**”), and Sumitomo Mitsui Banking Corporation (“**SMBC**”).
- The Revised Topping Proposal also is supported by additional equity financing of up to **\$1.8 billion** that would be raised from the issuance of preferred equity securities of Citgo Petroleum Corporation in private offering(s), as evidenced by the annexed Highly Confidential Letter from JP Morgan, the largest financial institution in the United States and one of the largest financial institutions in the world. The preferred equity raise will not reduce the consideration that will be distributed to Attached Judgment Creditors under this Revised Topping Proposal.
- No purchase price adjustments, “lock box,” “leakage”, or similar constructs are included in the Net Purchase Price.
- No portion of the Net Purchase Price is payable to an escrow or trust, whether in respect of the PDVSA 2020 Bonds, the Alter Ego Claims, or otherwise.
- The Revised Topping Proposal does not include any “earn-out” or deferred purchase price concepts.

- The Revised Topping Proposal does not include any requirements and is not subject to any closing condition precedent related to the PDVSA 2020 Notes or the Alter Ego Claims.
- The Revised Topping Proposal, in prioritizing a higher Net Purchase Price to the benefit of the Sale Process Parties and the Attached Judgment Creditors, is compliant with the requirement of Section 324 of Title 8 of the Delaware Code that the attached shares be sold “to the highest bidder”.
- As directed by the Court, and as explained in further detail below, the Purchaser has taken steps to “meaningfully address[]” the risk of the “possible impact of the 2020 Bondholders’ rights – whatever they may be (in reality or potentially) on the certainty of closing.” (D.I. 1741 at 4). This risk has also now, in Purchaser’s view, been substantially reduced, if not eliminated entirely, by the issuance by the U.S. Department of Treasury, Office of Foreign Assets Control (“OFAC”) on June 20, 2025 of GL-5S, as explained in detail in Gold Reserve’s June 24, 2025 filing with the Court (D.I. 1816). The Purchaser reserves the right to take further steps to address this stated risk and looks forward to continued communications with the Special Master and his advisors regarding the same.
- The details of how the Net Purchase Price will satisfy the Attached Judgments at Closing is set out in the below chart.
- In the below chart, a Closing Date of December 31, 2026 is used for illustrative calculation purposes only. The Purchaser is committed to closing the proposed transaction as soon as is possible and, assuming all regulatory approvals are timely provided, expects Closing to occur by December 31, 2025.

#	Attached Judgments as at December 31, 2026			
	Holder:	Value (\$mm) ³	Consideration	Cash Paid at Closing (\$mm)
1	Crystallex	\$1,025	Cash	\$1,025
2	Tidewater #1	\$80	Cash	\$80
3	Tidewater #2	\$3	Cash	\$3
4	Conoco Phillips (#1)	\$1,444	Cash	\$1,444
5	OIEG	\$695	Cash	\$695
6	Huntington Ingalls	\$140	Cash	\$140
7	ACL1	\$119	Cash	\$119
8	Red Tree #1	\$232	Cash	\$232
9	Red Tree #2	\$135	Cash	\$135

³ The value of the Attached Judgments is calculated for illustrative purposes through December 31, 2026, using the methodology used by the Special Master to calculate the Attached Judgments through December 31, 2024.

10	Red Tree #3	\$3	Cash	\$3
11	Rusoro	\$1,584	Dalinar Securities	--
12	Conoco Phillips (#2)	\$49	Cash	\$49
13	Koch	\$473	Dalinar Securities	--
14	Gold Reserve	\$1,299	Dalinar Securities	--
15	Siemens	\$249	Dalinar Securities	
	Total	\$7,530		\$3,925

The Revised Topping Proposal is submitted pursuant to the topping bid instruction letter sent by Ray Strong on behalf of Robert B. Pincus, Special Master (the “**Special Master**”) for the United States District Court for the District of Delaware (the “**Court**”), dated April 28, 2025 (the “**Topping Bid Instruction Letter**”),⁴ and the *Sixth Revised Proposed Order (A) Establishing Sale and Bidding Procedures, (B) Approving Special Master’s Report and Recommendation Regarding Proposed Sale Procedures Order, (C) Affirming Retention of Evercore as Investment Banker by Special Master and (D) Regarding Related Matters* (D.I. 481) (as amended, modified, supplemented, or superseded, the “**Sale Procedures Order**”) dated October 4, 2022, in the case of *Crystallex International Corporation v. Bolivarian Republic of Venezuela*, No. 17 Misc. 151 (D. Del) (the “**Crystallex Case**”).

Capitalized terms used herein and not otherwise defined have the meanings given to them in the Topping Bid Instruction Letter and Sale Procedures Order.

A. Proposed Transaction Structure

The Revised Topping Proposal is for the purchase of 100% of the common shares of PDVH, sold free and clear of all claims, encumbrances, and liabilities on or against the shares, in accordance with the terms of the Sale Procedures Order and subject to the qualifications referenced in Paragraphs A.iv. and F. below.

As directed in the Topping Bid Instruction Letter, the Revised Topping Proposal is based on the following key assumptions and notes:

- i. **Purchase Price; No Adjustments.** The net purchase price for the shares of PDVH is \$7.530 billion. This is a fixed dollar amount. No purchase price adjustments, “lock box,” “leakage,” or similar constructs are included in the purchase price. The Revised Topping Proposal is made in reliance on the Purchaser receiving protection through the interim operating covenants set forth in the SPA, under which PDVH/CITGO will be operated in the ordinary course of business.

⁴ To the extent that the Topping Bid Instruction Letter contains terms or conditions that are in variance with, or conflict, with the terms of the Sale Procedures Order or other order of the Court, the Court’s Orders control and therefore would supersede any such terms of the Topping Bid Instruction Letter.

- ii. No Escrows. No portion of the purchase price is payable to an escrow.
- iii. No “Earn-Out” Payment or Deferred Purchase Price. The Revised Topping Proposal does not include any “earn-out” or deferred purchase price concepts.
- iv. No Trust/Escrow Constructs regarding PDVSA 2020 Bonds Share Pledge. The Revised Topping Proposal does not include any trust/escrow constructs or similar revisions regarding the PDVSA 2020 Notes and does not include any closing conditionality related to the PDVSA 2020 Notes. The Revised Topping Proposal does take into consideration the Court’s additional guidance in the *Order*, dated April 21, 2025 (D.I. 1741) related to such matters.
- v. No Stand-Alone Closing Conditions relating to Alter Ego Claims. The Revised Topping Proposal and Proposed SPA (defined below) do not include any stand-alone closing conditions relating to Alter Ego claims, and the Proposed SPA does not include trust/escrow constructs or purchase price alterations relating to Alter Ego claims.

B. Stock Purchase Agreement

Attached hereto at Annex 1 is a draft Stock Purchase Agreement (the “**Proposed SPA**”) that provides for the Purchaser’s acquisition of 100% of the shares of PDVH, together with a redline (attached as Annex 2) marked to show Purchaser’s proposed changes to the Stalking Horse Agreement, including any proposed changes to all exhibits and schedules thereto.

As requested by the Special Master, comments are provided in Microsoft Word format and both a clean Word version as well as the above-referenced PDF comparison to the Stalking Horse Agreement are attached.

As requested by the Special Master, a PDF comparison to the final version of the Consortium’s prior proposed Revised Topping Proposal SPA dated June 18, 2025 is attached as Annex 3.

C. Identity of Purchaser

Dalinar Energy, a Delaware corporation and wholly-owned subsidiary of Gold Reserve, is an American-led energy company, driven by a team of seasoned directors with a proven track record in the industry, and oil and gas in particular. Supported by investments from two subsidiaries of Koch who will become shareholders of Dalinar Energy upon closing of the Proposed Transaction, Dalinar Energy is focused on driving sustainable growth and optimal performance for CITGO. Further details regarding Dalinar Energy can be found here: <https://www.dalinarenergy.com/>.

Dalinar Energy was formed for the purpose of submitting a bid in the Sale Process, entering into the Definitive SPA (defined below) and closing on the Proposed Transaction. Dalinar Energy is expected to have no other material assets, liabilities, or business. Per the terms of the Definitive SPA, and as required, Gold Reserve will guarantee certain of Purchaser’s obligations under the Definitive SPA.

Gold Reserve has historically been engaged in the business of evaluating, acquiring, exploring, and developing mining projects. At present, Gold Reserve's primary activities include those related to corporate and legal activities associated with the collection of the unpaid balance of its arbitration award against the Republic of Venezuela and resulting judgments, including its Attached Judgment in these proceedings.

Gold Reserve's Class A common shares trade on the TSX Venture Exchange and are quoted on the OTCQX Markets Exchange. On September 30, 2024, Gold Reserve Inc. completed a continuance and re-domiciled from Alberta, Canada to Bermuda, and in connection therewith changed its name to Gold Reserve Ltd. Gold Reserve's registered address in Bermuda is Rosebank Centre, 5th Floor, 11 Bermudiana Road, Pembroke HM 08, Bermuda. Gold Reserve maintains an executive and administrative office at 999 West Riverside Ave., Suite 401, Spokane, Washington 99201.

D. Purchase Price and Principal Economic Terms

Purchaser would pay a net purchase price of \$7.530 billion for the shares of PDVH, comprised of the below components:

- A credit bid of Gold Reserve's entire Attached Judgment, for which Gold Reserve will receive at Closing accept specified non-cash consideration, including in the form of preferred and common equity of Dalinar Energy, on the agreed terms as set forth in the Bid Letter, or as otherwise subsequently agreed. The amount of Gold Reserve's Attached Judgment (the "**Gold Reserve Judgment**"), inclusive of post-judgment interest, was calculated by the Special Master as \$1,138,508,078.61 as at December 31, 2024. At the illustrative Closing Date of December 31, 2026, the Gold Reserve Judgment, inclusive of post-judgment interest calculated using the Special Master's methodology, is calculated to be \$1,299,000,000.
- A credit bid of Koch's entire Attached Judgment (the "**Koch Judgment**"), for which Koch will receive at Closing accept specified non-cash consideration, including in the form of preferred and common equity of Dalinar Energy, on the agreed terms as set forth in the Bid Letter, or as otherwise subsequently agreed. The amount of the Koch Judgment, inclusive of post-judgment interest, was calculated by the Special Master as \$463,374,390 as at December 31, 2024. At the illustrative Closing Date of December 31, 2026, the Koch Judgment, inclusive of post-judgment interest calculated using the Special Master's methodology, is calculated to be \$473,000,000.
- A credit bid of Rusoro's entire Attached Judgment (the "**Rusoro Judgment**"), for which Rusoro will receive at Closing equity securities of Dalinar Energy. The amount of the Rusoro Judgment, inclusive of post-judgment interest, was calculated by the Special Master as \$1,522,342,917 as at December 31, 2024. At the illustrative Closing Date of December 31, 2026, the Rusoro Judgment, inclusive of post-judgment interest calculated using the Special Master's methodology, is calculated to be \$1,584,000,000.
- A credit bid of the entire Siemens' Judgment, for which XYQ will receive at Closing equity securities of Dalinar Energy. The amount of the Siemens Judgment, inclusive

of post-judgment interest, was calculated by the Special Master as \$211,384,366.59 as at December 31, 2024. At the illustrative Closing Date of December 31, 2026, the Siemens Judgment, inclusive of post-judgment interest calculated using the Special Master's methodology, is calculated to be \$248,846,961.

- Debt financing up to the amount of \$4,500,000,000 to support cash payments in the total amount of \$3,925,000,000 to satisfy in full, at Closing, the following Attached Judgment Holders, listed in the priority order established by the Court: Crystallex; Tidewater; ConocoPhillips (Judgments #1 and #2); OIEG; Huntington Ingalls; ACL1; and Red Tree, as set forth in the above chart.

The purchase price assigned to the shares of PDVH in this Revised Topping Proposal satisfies the Overbid Minimum (as defined in the Stalking Horse Agreement) requirement (*i.e.*, the purchase price assigned to the shares of PDVH exceeds (i) the purchase price payable by the Stalking Horse pursuant to the Stalking Horse Agreement, plus (ii) the Termination Fee payable to the Stalking Horse, plus (iii) \$25,000,000).

E. Sources of Financing

Set out below is a revised Sources and Uses table, which provides a detailed description of the sources and uses of financing for the Revised Topping Proposal.

PROJECT HORIZON | Sources & Uses

SOURCES			
(Figures in \$Millions Unless Noted)			
	Cash	Claims	Total
CitPet Cash (1)	1,201		1,201
Gold Reserve Deposit (2)	50		50
Debt			
Term Loan	2,000		
Senior Secured Notes	2,500		
\$2.0B ABL Draw (3)	350		4,850
Equity Securities			
<u>Preferred Equity:</u>			
Rnsoro		1,000	
Koch		350	
Gold Reserve		150	1,500
<u>Common Equity:</u>			
Rnsoro		584	
Koch		123	
Gold Reserve		1,149	
Siemens		249	2,105
Total	6,101	3,605	9,706

(1) Assumes net-debt zero cash balance at closing.

(2) Funded from available cash reserves.

(3) ABL draw of \$350M permitted at closing

USES			
(Figures in \$Millions Unless Noted)			
	Cash	Securities	Total
Attached Judgement Redemptions (1)			
1) Crystallex	1,025	-	1,025
2) Tidewater	83	-	83
3) Conoco Phillips	1,444	-	1,444
4) OI European	695	-	695
5) Huntington Ingalls	140	-	140
6) ACL1	119	-	119
7) Red Tree	370	-	370
8) Rnsoro Mining	-	1,584	1,584
9) Conoco Phillips	49	-	49
10) Koch Ag & Energy	-	473	473
11) Gold Reserve	-	1,299	1,299
12) Siemens	-	249	249
Total Redeemed Claims	3,925	3,605	7,530
Retire Existing Citgo Debt:			
8.375% 2029 SSN	1,100		1,100
Call Premium on 2029 SSN	46		46
Minimum Starting Cash	250		250
Stalking Horse Fee	75		75
Transaction Fees & Expenses	468		468
ABL/TLB Repayment	237		237
Total	6,101	3,605	9,706

(1) Assumes 12/31/26 transaction close. Purchase price to be adjusted to reflect accrued judgement interest at time of closing.

Attached hereto at Annex 4 are the Commitment Letters executed by the third-party financing sources that support the debt-financing component of the Revised Topping Proposal, *i.e.*, fully committed debt financing up to \$6.5 billion, of which \$4.85 billion will be available at Closing, with an additional \$1.65 billion in asset-based lending available post-Closing. Purchaser's sources of financing are all free of off-market contingencies other than closing conditions outlined in the SPA. The Commitment Letters demonstrate that Purchaser's financing is not subject to any financing condition, and this Revised Topping Proposal is not subject to any financing condition.

For the convenience of the Special Master, a redline marked to show the changes to the prior version of the Commitment Letters attached to Purchaser's June 18, 2025 Revised Topping Proposal is attached as Annex 5.

F. Credit Bid

Purchaser confirms that it is submitting a credit bid for the shares of PDVH consistent with the terms outlined in the Sale Procedures Order. The details of the credit bid are set forth above in Section D. For the avoidance of doubt, the credit bid: (i) will provide sufficient cash consideration to pay in full all Transaction Expenses; (ii) will provide sufficient cash (or consented non-cash consideration) to satisfy in full any obligations secured by a senior lien on the shares of PDVH (which, for the purposes of this section F, shall not include the Purported CITGO Equity Pledge); and (iii) is accompanied by evidence of the consent of Gold Reserve, Rusoro, Koch, and XYQ that each has agreed to receive non-cash consideration, in the form of the Bidder Equity Commitment Letter / Consent to Accept Non-Cash Consideration attached hereto at Annex 6 and Annex 7.

G. Good Faith Deposit

Evidence of Purchaser's financial ability to make a cash deposit (in the amount of \$50 million) on the date of entry of the sale order by the Court for the Proposed Transaction is attached hereto at Annex 8.

H. Purchaser Approvals

Attached hereto at Annex 9 is evidence of the requisite corporate or other organizational authority and approval for Purchaser with respect to the submission, execution, and delivery of the Revised Topping Proposal (including the execution of the Proposed SPA), participation in any auction, and closing of the Proposed Transaction contemplated by the Proposed SPA in accordance with its terms and the terms of the Sale Procedures Order (including the Bidding Procedures contained therein).

Purchaser does not anticipate a need for further approvals to execute a definitive Stock Purchase Agreement (the "**Definitive SPA**").

Purchaser confirms that it will make in a timely manner (a) all filings and disclosures necessary to comply with the regulations of OFAC, (b) all necessary filings under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and any other antitrust laws, as applicable, and pay the fees associated with such filings, and (c) all necessary filings in connection with

any review by the Committee on Foreign Investment in the United States (CFIUS), if applicable.

This confirms that the Purchaser's Revised Topping Proposal, if selected as the Successful Bid and approved by the Court, is reasonably likely to be consummated within a timeframe acceptable to the Special Master and the Court, after taking into consideration antitrust and any other regulatory matters and given Purchaser's and Gold Reserve's prior experience in such matters and any other relevant considerations.

I. Due Diligence Requirements

The Revised Topping Proposal is not subject to any other due diligence, except that which is permitted by the Special Master.

J. Advisors

Purchaser has retained the following advisors in connection with the Proposed Transaction:

Brown Rudnick LLP

Norton Rose Fulbright US LLP

K. Contacts

The following is a list of persons (including e-mail addresses and phone numbers) who should be contacted with respect to any questions regarding the Revised Topping Proposal:

Paul Rivett
CEO, Director, Dalinar Energy
CEO, Executive Vice-Chairman, Gold Reserve privett@goldreserve.bm
416-278-5806

Dave Onzay
Chief Financial Officer, Gold Reserve donzay@goldreserve.bm
509-623-1500

L. Special Master Consent

The Purchaser consents to the Special Master, in his discretion, sharing information pertaining to the Purchaser or Purchaser's Revised Topping Proposal with U.S. Government regulators, including OFAC, as well as the Sale Process Parties and Additional Judgment Creditors, subject to the limitations of bidding Sale Process Parties or Additional Judgment Creditors to receive bid information established by the Court, including in the December Order, and subject to the confidentiality restrictions applicable to the Sale Process.

M. Cooperation

The Purchaser (i) agrees that its advisors will coordinate in good faith with the Special

Master's advisors to discuss and explain its regulatory and other consent analysis, strategy, and timeline for securing all such approvals and consents as soon as reasonably practicable and (ii) agrees to cooperate with the Special Master to provide pertinent factual information regarding its ownership and operations reasonably required to respond to, or otherwise analyze issues arising with respect to, U.S. sanctions laws and regulations, CFIUS, any applicable antitrust laws and other relevant regulatory requirements or requests.

N. No Entitlement to Reimbursement

The Purchaser agrees that the Revised Topping Proposal does not entitle it to any break-up fee, termination fee, expense reimbursement, or similar type of payment or reimbursement; except for as provided in the January Order or as is otherwise ordered by the Court.

O. No Liability

The Purchaser agrees that (i) in no circumstance shall the Special Master or his advisors be personally or otherwise liable for any amounts or obligations owed to the Purchaser, (ii) the Special Master and his advisors are acting as an arm of the Court and are entitled to judicial immunity in the performance of their duties, and (iii) PDVH, CITGO and their respective officers, directors and advisors will have no liability or obligation to Purchaser or its affiliates in connection with the execution of the Definitive SPA.

P. Representations and Warranties

Without limiting any terms expressly provided for in the SPA if, as and when executed, and pursuant to the Bidding Procedures set out in the Sale Procedures Order:

a. the Purchaser states that it recognizes and acknowledges that the Special Master, his advisors, PDVH, CITGO, and their respective representatives make no representations, covenants, or warranties (or any other promise) as to the accuracy or completeness of any information provided in the data room or otherwise made available by the Special Master and his advisors in connection with the bid process;

b. the Purchaser states that, other than with respect to Purchaser's reliance on the representations and warranties provided in the Definitive SPA if, as and when executed, Purchaser has relied solely upon its own independent review, investigation, and/or inspection of any relevant documents regarding the assets to be purchased and did not rely on any written or oral statements, representations, promises, warranties, or guaranties whatsoever, whether express or implied, by operation of law or otherwise, regarding PDVH and its subsidiaries or the completeness of any information made available in connection therewith;

c. the Purchaser states that it has not engaged in any collusion with respect to the submission of the Revised Topping Proposal; and

d. the Purchaser states that all proof of financial ability to consummate the Proposed Transaction in a timely manner and other information Purchaser submits is true and correct.

Q. Bidding Procedures

The Purchaser agrees to be bound by the terms and conditions of the Bidding Procedures, if any, set out in the Sale Procedures Order, as such order may be modified.

R. Steps Taken to Address Possible Impact of the 2020 Bondholders' Rights

As directed by the Court, the Purchaser has taken the below-listed steps to “meaningfully address[]” the risk of the “possible impact of the 2020 Bondholders’ rights – whatever they may be (in reality or potentially) on the certainty of closing.” (D.I. 1741 at 4). That said, as set forth above, Purchaser’s view is that is risk has been substantially reduced by OFAC’s issuance of GL-5S.

- The Purchaser has submitted to the Special Master an updated and revised evaluation of “any risk to closing posed by the 2020 Bondholders” (*id.* at 5-6) concurrently with its submission of this Revised Topping Proposal, engaged in several communications with the Special Master regarding this analysis, and looks forward to engaging in further communications with the Special Master following the submission of this Revised Topping Proposal and in advance of the Final Recommendation date and the Sale Hearing.
- The Purchaser has reviewed in good faith the Special Master’s further comments and suggested amendments to the proposed SPA attached to Purchaser’s June 3, 2025 proposal, June 18, 2025 proposal, and earlier June 25, 2025 proposal, all of which in turn took account of prior proposed changes made by the Special Master in the Stalking Horse Agreement, and the Purchaser has incorporated many of the Special Master’s comments and suggested amendments into its present proposed SPA, as noted in the attached redline.
- The Purchaser has also reviewed in good faith the Special Master’s comments and suggested amendments to the debt commitment letters attached to Purchaser’s June 3, 2025 proposal, June 18, 2025 proposal, and earlier June 25, 2025 proposal, all of which in turn took account of prior proposed changes made by the Special Master, and the Purchaser has incorporated many of the Special Master’s comments and suggested amendments into its present Commitment Letters, as noted in the attached redlines.
- To address a request made by the Special Master, the Purchaser previously submitted a “Commitment to Take Certain Regulatory Efforts” executed by each of the Consortium members: Gold Reserve, Koch and Rusoro. In response to comments made by the Special Master regarding this document, the Purchaser has updated its terms and attached a revised version hereto, at Annex 10, executed by Gold Reserve, Koch, Rusoro, and XYQ.
- Although the Court has made clear that a settlement with the 2020 Bondholder is not required in Final Bids (“**the Court rejects any suggestion that a Final Bid must include a settlement with the 2020 Bondholders**”) (D.I. 1741 at 4), the Purchaser has engaged in extensive, good faith negotiations with the 2020 Bondholders regarding a

potential settlement of their claims. These negotiations have been ongoing for several weeks and have been constructive. The Purchaser remains bound by the terms of a Confidentiality Agreement and cannot reveal the substance of those negotiations to the Special Master at this time. The Purchaser requested permission from the 2020 Bondholders to share the details of these negotiations to the Special Master, but the 2020 Bondholders refused this request. However, the Purchaser hereby represents that, while the negotiations have not resulted in a final settlement as of the date of this Revised Topping Proposal, the Purchaser is confident that, in conjunction with its consortium partners, it could consummate a settlement with the 2020 Bondholders after being named as the Final Recommended Bidder and after the Sale Order is entered by the Court. The Purchaser has developed, working with its lenders, well advanced drafts of debt commitment papers that would support such a settlement

- The Purchaser has concluded that conducting a preferred equity financing after it has been named as the Final Recommended Bidder would strengthen its ability to consummate any settlement with the 2020 Bondholders and the Purchaser, with its consortium partners, has taken definite steps to confirm that it can raise this financing, as evidenced by the Highly Confidential Letter attached hereto as Annex 11.

The Purchaser reserves the right to modify or improve its Revised Topping Proposal, and looks forward to continued communications with the Special Master and his advisors regarding the same.

Yours truly,

DALINAR ENERGY CORPORATION

Per: _____



Name: Paul Rivett

Title: CEO, Director

GOLD RESERVE LTD.

Per: _____



Name: Paul Rivett

Title: CEO, Executive Vice-Chairman



**DALINAR ENERGY CORPORATION REVISED TOPPING PROPOSAL FOR PURCHASE
 OF 100% SHARES OF PDV HOLDING INC. – JUNE 25, 2025**

INDEX OF ANNEXES

<u>Annex No.</u>	<u>Document Description</u>
Annex 1	<p>Stock Purchase Agreement (Clean Word)</p> <ul style="list-style-type: none"> • Buyer Disclosure Schedules • Company Disclosure Schedules • Exhibit A to the Stock Purchase Agreement – Escrow Agreement • Exhibit B to the Stock Purchase Agreement – Payments Administration Agreement • Exhibit C to the Stock Purchase Agreement – Form of Release • Exhibit D to the Stock Purchase Agreement – Form of Termination Release • Exhibit E to the Stock Purchase Agreement – Sale Order
Annex 2	<p>Stock Purchase Agreement (Redline Against Stalking Horse Agreement)</p> <ul style="list-style-type: none"> • Company Disclosure Schedules • Exhibit A to the Stock Purchase Agreement – Escrow Agreement • Exhibit B to the Stock Purchase Agreement – Payments Administration Agreement • Exhibit C to the Stock Purchase Agreement – Form of Release • Exhibit D to the Stock Purchase Agreement – Form of Termination Release

Annex 3	<p>Stock Purchase Agreement (Redline Against Prior Consortium Topping Proposal SPA dated June 18, 2025)</p> <ul style="list-style-type: none"> • Buyer Disclosure Schedules • Company Disclosure Schedules • Exhibit A to the Stock Purchase Agreement – Escrow Agreement • Exhibit B to the Stock Purchase Agreement – Payments Administration Agreement • Exhibit C to the Stock Purchase Agreement – Form of Release • Exhibit D to the Stock Purchase Agreement – Form of Termination Release
Annex 4	<p>Commitment Letters (Clean Redacted)</p> <ul style="list-style-type: none"> • Debt Commitment Letter with Attachments • Agent Fee Letter • Initial Commitment Party Fee Letter • Syndicate Fee Letter
Annex 5	<p>Commitment Letters (Redacted Redline Against Purchaser's Prior Topping Proposal Commitment Letters date June 18, 2025)</p> <ul style="list-style-type: none"> • Debt Commitment Letter with Attachments • Agent Fee Letter • Initial Commitment Party Fee Letter • Syndicate Fee Letter
Annex 6	Bidder Equity Commitment Letter / Consent to Accept Non-Cash Consideration / Cooperation – Gold Reserve, Koch and Rusoro
Annex 7	Bidder Equity Commitment Letter / Consent to Accept Non-Cash Consideration / Cooperation – XYQ
Annex 8	Proof of Ability to Pay Good Faith Deposit

Annex 9	Corporate Authorization
Annex 10	Commitment to Take Certain Regulatory Efforts Letter
Annex 11	Equity Financing -- Highly Confident Letter

Weisenburger Exhibits 22–30

Filed Under Seal Pursuant to D.I. 1887

Exhibit 2

Redacted

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

CRYSTALLEX INTERNATIONAL CORP.,
Plaintiff,
v.
BOLIVARIAN REPUBLIC OF
VENEZUELA,
Defendant.

Misc. No. 17-151-LPS

EXPERT REPORT OF JOSÉ ALBERRO, PHD

July 7, 2025

CONFIDENTIAL

Confidential

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I. Executive Summary

1. I estimate the fair market value (“FMV”) of PDV Holding, Inc. (“PDVH”) equity at \$18.6 billion. This figure is derived from a discounted cash flow (“DCF”) analysis, that discounts projected future cash flows to calculate intrinsic value.
2. The projections rely on CITGO Petroleum Corporation’s (“CPC”) latest operating forecasts (2025–2030) for crude-input and product-output volumes at its three refineries, combined with third-party price forecasts for crude oil and refined products. CPC is PVDH’s principal income-generating asset. I discount CPC’s projected free cash flows using a weighted-average cost of capital (WACC) calculated on an FMV basis. For periods beyond 2030, I employ the Gordon Growth Model, using the same WACC and a long-term growth rate. The net present values (NPVs) of cash flows during and after the explicit forecast horizon sum to an enterprise value of \$18.6 billion.
3. As a first cross check, I conduct a market multiples analysis of comparable publicly traded companies which yields an enterprise value for PDVH in the range of \$13.0 billion to \$18.5 billion, with a median of \$15.2 billion.
4. As a second cross-check, I carry out a comparable transactions analysis of recent US refining acquisitions which implies an enterprise value at approximately \$16.2 billion.
5. Among the three approaches, the DCF method offers the most reliable indication of value, for the reasons explained below.
6. To convert enterprise value to equity value, I add cash on its balance sheet and subtract total debt. Because cash roughly equals debt, I estimate PDVH’s equity value to be \$18.6 billion.

II. Qualifications

7. I am a Senior Managing Director and the Head of International Arbitration for Latin America at FTI Consulting. With over 40 years of experience in economic analysis across both the private and public sectors, my expertise lies in applied economic and financial modeling. I have provided consulting services across many industries, including hydrocarbons.

8. I have served as an expert witness in arbitrations, providing testimony on damage valuations in both investor-state and commercial disputes under the auspices of the International Centre for Settlement of Investment Disputes (“ICSID”), the International Chamber of Commerce (“ICC”), the United Nations Commission on International Trade Law (“UNCITRAL”), and the International Centre for Dispute Resolution (ICDR/AAA).

9. I have also served as an arbitrator at the ICSID and am a member of the American Arbitration Association’s National Roster of Arbitrators (Neutrals).

10. *Who’s Who Legal* has recognized me as one of the “foremost legal practitioners in business law based upon comprehensive, independent research” noting my “very strong reputation.” In 2017 and 2018, it named me a *Thought Leader* and in 2019, I was included among the *Thought Leaders Global Elite*. In 2020 and 2021, *Who’s Who Legal* ranked me as a *Global Leader* among expert witnesses in Litigation, Financial Advisory, Valuation and Quantum Damages. In 2021 and 2022, I was nominated by my peers as one of the world’s leading practitioners in my field. Additionally, *Financier Worldwide* recognized me as an exceptional expert and ‘power player’ in international arbitration.

11. I was a tenured full professor for ten years and taught economics at universities in the United States, Mexico, and the United Kingdom for 15 years. I am a member of the Mexican Academy of Science and have published extensively in academic journals. One of my papers was cited in the 1995 Nobel Prize in Economics Lecture. My work has appeared in the *Journal of International Arbitration*, the *Journal of Damages in International Arbitration*, the *International Arbitration Law Review*, the *ICSID Review – Foreign Investment Law Journal*, and the *International Commercial Arbitration Review*.

12. Before becoming a consultant, I had a distinguished 15-year career in the Mexican government. In 1992, the President of Mexico appointed me as the founding CEO of PEMEX Gas

y Petroquímica Básica, a major gas and gas liquids company with 13,000 employees, 12,000 kilometers of pipelines, and \$10.0 billion in sales. Before that, I served as the chief representative of PEMEX during the 1990-1992 NAFTA negotiations; Chief Economic Advisor to the Secretary of the Treasury, and Economic Advisor to the Secretary of Programming and the Budget. In 1993 and 1994, I was Chief of Staff to the Secretary of Commerce and Industrial Promotion.

13. I have consulted for the International Monetary Fund, the World Bank, the United Nations Development Program, and the Economic Commission for Latin America and the Caribbean. I hold an M.A. and a Ph.D. in Economics from the University of Chicago.

14. My CV and prior testimony are included in this report in **Appendix A**.

III. Scope and Assignment

15. Eimer Stahl LLP and Jones Day (jointly, “Counsel”) have engaged me to provide a fair market valuation (“FMV”) of the PDV Holding, Inc. (“PDVH”) equity on behalf of their clients CITGO Petroleum Corp. (“CPC”) and PDVH. I am not an auditor and have not been asked to perform an audit of CITGO Petroleum’s financial statements. CPC, CITGO Holding, Inc. (“CHI”), and PDVH report their financial information annually and quarterly. These entities are privately held, and their quarterly reports are designated as unaudited, though CITGO’s independent accountants review them in a manner consistent with SEC requirements for publicly traded companies.¹ I rely on these reports, accept the reported figures at face value, and do not conduct independent audit procedures to verify their accuracy.

16. I reviewed CITGO’s annual and quarterly reports, earnings calls, management presentations, and other relevant material detailing its historical financial performance. I have also reviewed its financial projections as outlined in its Medium Term Plan 2025–2030 (dated January 20, 2025, “MTP”),² as well as Evercore’s financial projections based on the MTP, the Confidential Information Memorandum prepared by Evercore (dated January 27, 2025), and other materials

¹ I use “CITGO” to refer to CITGO Petroleum Corporation when the reference is unambiguous.

² CITGO, Medium Term Plan 2025-2030, January 20, 2025 (“2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf”).

provided by Counsel.³ The materials that I relied upon in preparing this report are cited in the footnotes, while the complete list of materials considered is provided in **Appendix B**. This report and the opinions contained herein are based on my review of this information as well as my knowledge, education, experience, and training as an economist.

17. The opinions contained within this report are the results of my analysis to date and have been prepared in connection with this matter. To the extent that additional information becomes available to me between now and the hearing, I reserve the right to supplement, amend, or alter these opinions.

18. FTI is being compensated at an hourly rate of \$1,525 for my time on this matter. My compensation is not contingent on the opinions expressed within this report nor the outcome of this matter. My analysis is supported by my team at FTI. FTI is being compensated at hourly rates for each member of my team, and the hourly rates of my team are all lower than mine. The team works under my direction, and all opinions contained within this report are my own.

IV. Background and Facts of the Case

A. Case Background

19. Judgments against Petróleos de Venezuela, S.A. (“PDVSA”) and the Bolivarian Republic of Venezuela (“Venezuela”) have been entered in various US courts totaling approximately \$22.2 billion.⁴ These claims involve more than 15 claimants (“Claimants” or “Creditors”), including Crystallex, Tidewater, and ConocoPhillips, who are before the District Court of Delaware in this proceeding.⁵ The Court determined that the outstanding claims should be satisfied through the

³ Evercore, Revised CITGO Financial Projections, January 26, 2025 (“Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx”); Evercore, Confidential Information Memorandum, January 27, 2025 (“2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf”).

⁴ Evercore, Bid Summary, July 29, 2024 (“Project Horizon – DRAFT Bid Summary (07.29.24).pdf”), p. 2.

⁵ Evercore, Bid Summary, July 29, 2024 (“Project Horizon – DRAFT Bid Summary (07.29.24).pdf”), p. 2. The claimants with judgment claims against the Bolivarian Republic of Venezuela or PDVSA include Crystallex, Tidewater, ConocoPhillips (Petrozuata/Hamaca), OIEG, Northrop Grumman, ACL, Red Tree, Rusoro,

forced sale of shares of PDVH, a US-based subsidiary wholly owned by PDVSA. To oversee the sale, the Court appointed a Special Master, who determined that the sale would proceed through an auction process. The Special Master retained Evercore to administer the auction and rejected PDVH's alternative proposals, which sought to pursue other approaches that could yield higher values.

20. In 2016, PDVSA issued corporate bonds that were set to mature in 2020 and were secured by PDVH by a pledge of 50.1% of the equity of CITGO Holding as collateral. Both PDVH and PDVSA have filed lawsuits in the United States District Court for the Southern District of New York seeking to invalidate both the pledge and the bonds, arguing that they were issued in violation of Venezuelan law and are therefore void. The case remains pending. I do not attempt to assign a value to these claims, as their worth is contingent on legal determinations.

B. Corporate Structure

21. PDVH is a Delaware corporation and the sole owner of US-based CITGO Holding, Inc. ("CITGO Holding").⁶ While PDVH owns several subsidiaries apart from CITGO Holding, these other subsidiaries generate minimal revenue and profit. Nearly all PDVH's income is derived from its 100% ownership of CITGO Holding. CITGO Holding, also a Delaware corporation, is the sole owner of CITGO Petroleum Corporation ("CITGO Petroleum" or "CITGO" when unambiguous) a US-based operating company.⁷ CITGO Holding does not own any subsidiaries other than CITGO Petroleum. CITGO Petroleum is the sole owner (either directly or indirectly through its wholly owned subsidiaries) of all the CITGO assets and business operations in the United States. This includes 100% ownership of CITGO Investment Company and a 99% ownership stake in

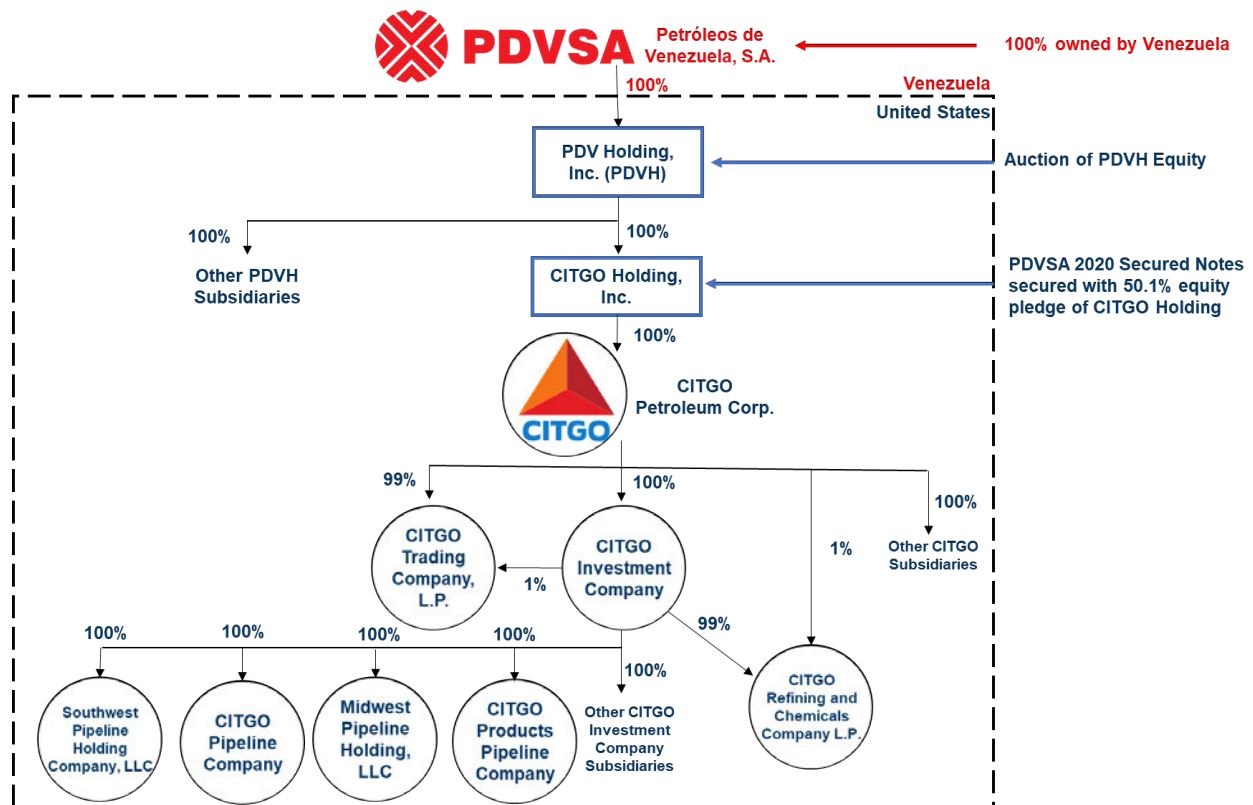
ConocoPhillips (Corocoro), Koch, Gold Reserve, Siemens, Consorcio, Contrarian, ConocoPhillips (ICSID), and other junior claimants. ConocoPhillips has three distinct judgment claims against PDVSA. According to the Court, "[t]he priority of any Additional Judgments will be based on the date on which a creditor moved for a writ of attachment (or a conditional writ of attachment) fieri facias that was eventually granted." *See* Memorandum Order, July 27, 2023, p. 23. The order of companies listed above is the order of priority as determined by the Court.

⁶ CITGO Organization Chart, December 5, 2023 ("2023 12 05 CITGO Org Chart Def_ REVISED.pdf"). *See also* Evercore, Confidential Information Memorandum, January 27, 2025 ("2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf"), p. 1.

⁷ *Ibid.*

CITGO Trading Company, L.P. (with the remaining 1% owned by CITGO Investment Company). CITGO Investment Company is the sole owner of numerous US-based operating subsidiaries, including Southwest Pipeline Holding Company, LLC; Pipeline Company; Midwest Pipeline Holding, LLC; CITGO Products Pipeline Company; and CITGO Refining and Chemicals Company L.P. (the latter owned 99% by CITGO Investing Company and 1% by CITGO Petroleum).⁸ Figure 1 below illustrates CITGO's corporate structure.

Figure 1. CITGO Corporate Structure



Sources: CITGO Organization Chart, December 5, 2023 ("2023 12 05 CITGO Org Chart Def_REVISIED.pdf"). See also Evercore, Confidential Information Memorandum, January 27, 2025 ("2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf"), p. 1; CITGO Organization Chart, June 10, 2025 ("2025 06 10 CITGO Org Chart Def_REVISIED.pdf_Confidential – Restricted").

⁸ Ibid.

22. PDVH and all its subsidiaries are US-based companies, including its direct ownership of CITGO Holding and indirect ownership of CITGO Petroleum. PDVSA is a Venezuelan company owned by the government of Venezuela.

C. CITGO Petroleum Corporation

23. CITGO Petroleum owns all the revenue-generating CITGO business units in the United States. Its assets and operations include three oil refineries (Lake Charles, Corpus Christi, and Lemont), forty-six wholly or jointly owned terminals, five pipelines, and three lubrication plants. Additionally, CITGO Petroleum licenses the CITGO trademark to approximately 4,000 branded retail gas stations.⁹

24. CITGO's Petroleum refineries are its most valuable assets. The Lake Charles refinery in Louisiana can process 463,000 barrels per day.¹⁰ The Corpus Christi refinery in Texas has a capacity of 167,000 barrels per day.¹¹ The Lemont refinery in Illinois (near Joliet) has a capacity of 177,000 barrels per day.¹² With a total refining capacity of 807,000 barrels per day, CITGO ranks as the fifth largest independent oil refiner in the United States.¹³ The Lake Charles and Corpus Christi refineries, located on the Gulf of Mexico, have access to the largest U.S. crude basins, including the Permian and Eagle Ford Basins, and are also connected to foreign crude

⁹ Evercore, Confidential Information Memorandum, January 27, 2025 ("2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf"), p. 11. CITGO sells gas to independent marketers for branded retail locations, who then sell it at their retail location. "We sell branded gasoline to more than 260 marketers who in turn sell the product through more than 4,000 independently owned and operated CITGO-branded retail outlets." *See* CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, p. 48.

¹⁰ Evercore, Confidential Information Memorandum, January 27, 2025 ("2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf"), p. 12.

¹¹ *Ibid.*

¹² *Ibid.*

¹³ *Id.*, p. 11. *See also* CITGO, "CITGO Launches Premier Status: Unlocking More Savings for Loyal Customers," May 29, 2025, accessed June 30, 2025, available at <https://www.citgo.com/newsroom/press-releases/2025/citgo-launches-premier-status-unlocking-more-savings-for-loyal-customers>.

slates.¹⁴ The Lemont refinery is connected by pipeline to Western Canadian crude oil.¹⁵ CITGO employs approximately 3,710 workers in the United States.¹⁶

25. The Lake Charles refinery is the seventh largest in the United States, strategically located on the Calcasieu Ship Channel in Louisiana. It has access to both the Sabine River and the Mississippi River¹⁷, domestic and Canadian crudes, key transportation hubs (including Cushing, Houston, Nederland/Beaumont, and the Strategic Petroleum Reserve), and major pipelines (Sour Lake, Marketlink, Permian Express, Bayou Bridge, and Zydeco).¹⁸ In 2024, the refinery operated at 93% utilization.¹⁹ In 2024, its crude input consisted of 84% light sweet crude and 16% heavy crude.²⁰ The product yield prominently featured light fuels, including 47% gasoline, 11% jet fuel, and 31% diesel.²¹ It serves the domestic mid-Atlantic market via the Colonial Pipeline and international markets via ocean tankers.²² In 2024, its gross margin was \$1,654 million, and its EBITDA was \$633 million.²³

26. Located on the Gulf Coast in Texas, the Corpus Christi refinery benefits from access to the Eagle Ford and Permian basins.²⁴ In 2024, it operated at 89% utilization of its 167,000 barrel per day crude capacity.²⁵ In 2024, the refinery crude input comprised 41% heavy sour, 27% light sweet, 10% light sour, and 22% other feedstocks.²⁶ The product yield for 2024 was 82% light

¹⁴ Id., p. 16.

¹⁵ Ibid.

¹⁶ Id., p. 11.

¹⁷ Id., p. 28.

¹⁸ Ibid. *See also* CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, p. 43.

¹⁹ CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, p. 43.

²⁰ Ibid. Other feedstocks are not included in the input share.

²¹ Ibid.

²² Ibid.

²³ CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 15.

²⁴ Evercore, Confidential Information Memorandum, January 27, 2025 (“2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf”), p. 43.

²⁵ CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, p. 44.

²⁶ Ibid. Other feedstocks are included in the input share. Heavy sour crude accounted for 41% (79/191), light sweet crude accounted for 27% (51/191), light sour crude accounted for 10% (19/191), and other feedstocks accounted for 22% (42/191).

fuels: 46% gasoline and 36% diesel.²⁷ The refinery also has petrochemical processing capabilities, including high-octane blend stocks, cumene, toluene, and xylenes, and industrial products such as petroleum coke.²⁸ Petrochemicals and industrial products account for 8% and 10% (18% total) respectively of the 2024 yield.²⁹ The Corpus Christi refinery serves domestic markets in Texas and Florida and international markets via third-party pipelines and marine access, utilizing 11 docks.³⁰ Its strategic location generates significant export opportunities for refined products and import capacity of foreign crudes. In 2024, its gross margin was \$629 million, and its EBITDA was \$49 million.³¹

27. Located in Romeoville, Illinois, the Lemont refinery has direct access to Canadian crude via the Enbridge pipeline system and serves high-demand areas of the US Midwest market, including Chicago.³² In 2024, it achieved 98% utilization of its 177,000 barrel per day crude capacity.³³ The refinery specializes in processing heavy Canadian crude, leveraging its high coking capacity to refine more heavy crude than most regional refineries. In 2024, its crude input consisted of 49% heavy crude, 35% light sweet crude, 6% light sour crude, and 10% other feedstocks.³⁴ In turn, light fuels contributed 83% to product yield, including gasoline (50%), jet fuel (4%), and diesel (29%).³⁵ Other key outputs include petrochemicals (3% of product yield) and industrial products (14% of product yield).³⁶ Lemont is one of only three U.S. refineries with complete

²⁷ Ibid.

²⁸ Ibid. *See also* Evercore, Confidential Information Memorandum, January 27, 2025 (“2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf”), p. 43.

²⁹ CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, p. 44.

³⁰ Evercore, Confidential Information Memorandum, January 27, 2025 (“2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf”), p. 43. *See also* CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, p. 44.

³¹ CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 16.

³² Evercore, Confidential Information Memorandum, January 27, 2025 (“2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf”), p. 55.

³³ CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, pp. 45-46.

³⁴ Ibid. Other feedstocks are included in the input share. Heavy sour crude accounted for 49% (94/193), light sweet crude accounted for 35% (67/193), light sour crude accounted for 6% (12/193), and other feedstocks accounted for 10% (20/193).

³⁵ Ibid.

³⁶ Ibid.

aliphatic solvent production capabilities.³⁷ Due to its location along the Chicago Sanitary and Ship Canal, which connects the Des Plaines River, the Illinois River, and the Mississippi, the refinery has logistical reach beyond the Midwest, extending to the Gulf of Mexico.³⁸ In 2024, its gross margin was \$960 million, and its EBITDA was \$389 million.³⁹

28. In addition to its three refineries, CITGO has extensive storage, transportation, and blending assets: it wholly owns thirty-four active terminals, four inactive terminals and jointly owns eight terminals, which, combined, provide 22.8 million barrels of storage.⁴⁰ CITGO also wholly owns five pipelines in the United States:

- the Sour Lake pipeline that transports crude from Sour Lake, Texas to the Lake Charles refinery;
- the Lakemont pipeline that transports liquefied petroleum gas (“LPG”) between the Lake Charles refinery and the Mont Belvieu propane market;
- the Lafitte Gas pipeline that transports natural gas from the mainline carriers to the Lake Charles refinery;
- the CASA Refined Products pipeline that transports gasoline and distillates from the Corpus Christi refinery to CITGO marketing terminals; and
- the Beeline pipeline that transports jet fuel from the CITGO Port Everglades terminal to the Fort Lauderdale airport.⁴¹

29. CITGO is also a partial owner of four joint interest pipelines:

- the West Shore pipeline from Illinois to Wisconsin;

³⁷ Ibid.

³⁸ Ibid.

³⁹ CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 17.

⁴⁰ Evercore, Confidential Information Memorandum, January 27, 2025 (“2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf”), p. 67.

⁴¹ Id., pp. 68-69.

- the Wolverine pipeline in Michigan;
- the Inland Corporation pipeline in Ohio; and
- the Lake Charles pipeline that connects the Lake Charles refinery to the Colonial pipeline.⁴²

30. Terminals and pipelines contributed an estimated \$169 million to CITGO's reported EBITDA in 2024.⁴³

31. CITGO has three blending and packaging facilities for lubricants, including Cicero, Illinois, Oklahoma City, Oklahoma, and Atlanta, Georgia.⁴⁴ Cicero is the largest plant, with a production capacity of 50 million gallons per year for lubricants and 18 million gallons per year for greases.⁴⁵ In turn, CITGO markets these lubricants, both branded and private label, to existing accounts and distributors with particular emphasis on greases and heavy-duty engine oil.⁴⁶ CITGO's lubricants business contributed \$25 million to CITGO's reported 2024 EBITDA.⁴⁷

32. CITGO sells CITGO-branded gasoline and diesel to independent marketers, who then distribute it to both branded and unbranded retail locations.⁴⁸ Branded retail locations are independently owned within the United States. All 4,000 branded retail locations are in the Eastern and Midwestern United States.⁴⁹ In 2024, marketing contributed an estimated EBITDA of \$146 million.⁵⁰

⁴² Id., p. 70.

⁴³ CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 10.

⁴⁴ Evercore, Confidential Information Memorandum, January 27, 2025 ("2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf"), p. 79.

⁴⁵ Ibid.

⁴⁶ CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, p. 49.

⁴⁷ CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 10.

⁴⁸ CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, p. 48-49.

⁴⁹ Ibid; CITGO, "Operations," accessed April 28, 2025, available at <https://www.citgo.com/operations>.

⁵⁰ CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 10.

V. The Energy Transition and the Price of Oil/Crack Spreads

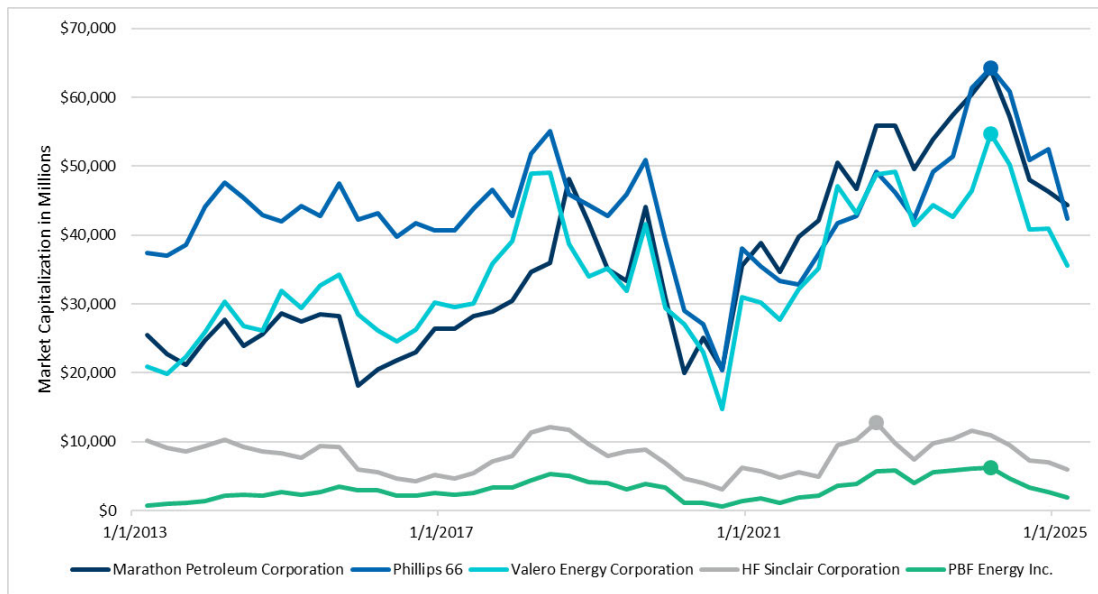
33. The global energy landscape is undergoing rapid transformation, with significant implications for the petroleum industry and the broader energy outlook in both the United States and international markets. Over the past year, these structural shifts have become more apparent and widely acknowledged.

34. The hydrocarbons market—and CITGO’s positioning within it—has evolved in recent years. A slower-than-anticipated energy transition, combined with delayed capital investment decisions, are two developments that support a favorable valuation outlook for CITGO. While initial signs of these trends emerged prior to the end of 2023, broad consensus on their implications did not coalesce until 2024, with further developments continuing through the first half of 2025.

35. As outlined below, the Energy Transition has had, and is expected to continue having, a significant impact on the refining industry, particularly in regions most committed to addressing climate change, such as the United States and the European Union. These effects include:

- Strategic investments in new fossil fuel capacity have been limited to marginal improvements in existing plant operations, with capital increasingly redirected towards biofuels and alternative uses.
- The number of active oil refineries has declined and is expected to decrease further as facilities are either converted to low-carbon applications or permanently shut down.
- Meanwhile, the projected “peak oil” demand date has been significantly delayed as previous expectations for Electric Vehicle (“EV”) market penetration have proven overly optimistic regarding consumer adoption.
- Refinery margins, both in the near- and long-term have undergone a structural shift with remaining operational refineries expected to sustain high profitability.
- At the same time, public market equity trading values in the refining sector reached all-time highs in late 2023 and early 2024 for well-capitalized and efficiently operated refiners. **Figure 2** below illustrates the market capitalization for the five most comparable refiners from January 2013 to January 2025. The market capitalization highs for each refiner are marked in the figure.

Figure 2. Market Capitalization of Comparable Companies, 2013:Q1–2025:Q1



Source: S&P Platts.

Note: The round marker represents the company's all-time high.

- CITGO is part of this group of well-capitalized and efficiently operated refiners due to the scale, strategic location, and competitive advantages of its refining assets, including their complexity and adaptability to shifting market conditions both domestically and in export markets.

36. These fundamental shifts have created unique circumstances that were not factored into the design of the Special Master's sales process.

A. Electric Vehicles

37. Electric vehicle ("EV") sales grew rapidly during much of 2023 as they had in prior years. At the time, most forecasts projected that this trend would continue, leading to expectations of declining demand for petroleum-based transportation fuels such as gasoline and diesel.

38. However, the latest data indicates a slowdown in the growth rate of EV sales globally. Bloomberg attributes this deceleration to three primary factors:

- Rising concerns about EV manufacturing capital costs and investment plans.

- Potential changes in government policies and tariffs affecting the EV industry.
- Governments scaling back financial incentives for EV buyers.⁵¹

39. A Washington Post article published in early April 2025 highlights that Americans are less interested in buying and owning electric vehicles than they were two years ago.⁵² The article further uses Gallup's⁵³ poll to derive that the percentage of Americans who own or are interested in owning an EV has dropped eight points since 2023 (from 59% to 51%).⁵⁴ J.D. Power now considers 2025 to be a reset year for EV sales, predicting a series of headwinds to EV adoption, which will result in EV growth stagnating in 2025.⁵⁵ The slowdown in EV sales is even more pronounced in the United States, where nearly 20% of the total world oil consumption occurs.⁵⁶ Transportation accounts for 67% of total US petroleum consumption.⁵⁷ Resulting in almost 13% of world oil consumption on US transportation.⁵⁸

40. In the US, growth in electric car sales slowed down significantly in 2024, increasing by just 10% year on year compared to 40% year on year in 2023.⁵⁹ **Figure 3** below illustrates this trend. The figure shows that unit sales of Battery Electric Vehicles ("BEVs"), represented by

⁵¹ Joshua Gallu and Wilfried Eckl-Dorna, "Electric Vehicle Sales Have Stumbled. What Went Wrong?," BNN Bloomberg, January 17, 2025, accessed April 24, 2025, available at <https://www.bnnbloomberg.ca/business/technology/2025/01/17/electric-vehicle-sales-have-stumbled-what-went-wrong/>.

⁵² Shannon Osaka, "Americans are losing interest in EVs. And it's not just about Elon Musk," Washington Post, April 8, 2025, accessed April 24, 2025, available at <https://www.washingtonpost.com/climate-environment/2025/04/08/electric-vehicles-sales-us/>.

⁵³ Lydia Saad, "U.S. Electric Vehicle Interest Steady at Lower 2024 Level," Gallup, April 8, 2025, accessed April 24, 2025, available at <https://news.gallup.com/poll/658964/electric-vehicle-interest-steady-lower-2024-level.aspx>.

⁵⁴ Shannon Osaka, "Americans are losing interest in EVs. And it's not just about Elon Musk," Washington Post, April 8, 2025, accessed April 24, 2025, available at <https://www.washingtonpost.com/climate-environment/2025/04/08/electric-vehicles-sales-us/>.

⁵⁵ J.D. Power, "2025 To Be Reset Year for EV Sales," February 11, 2025, accessed April 8, 2025, available at <https://www.jdpower.com/business/resources/e-vision-intelligence-report-january-2025>.

⁵⁶ U.S. Energy Information Administration, "Frequently Asked Questions (FAQs)," April 11, 2024, accessed June 26, 2025, available at <https://www.eia.gov/tools/faqs/faq.php?id=709&t=6>.

⁵⁷ U.S. Energy Information Administration, "Oil and petroleum products explained: Use of oil," accessed June 26, 2025, available at <https://www.eia.gov/energyexplained/oil-and-petroleum-products/use-of-oil.php>.

⁵⁸ 20% of total world oil consumption in U.S. and 67% of U.S. oil consumption is on transportation. $20\% \times 67\% = 13.4\%$ of world oil consumption on U.S. transportation.

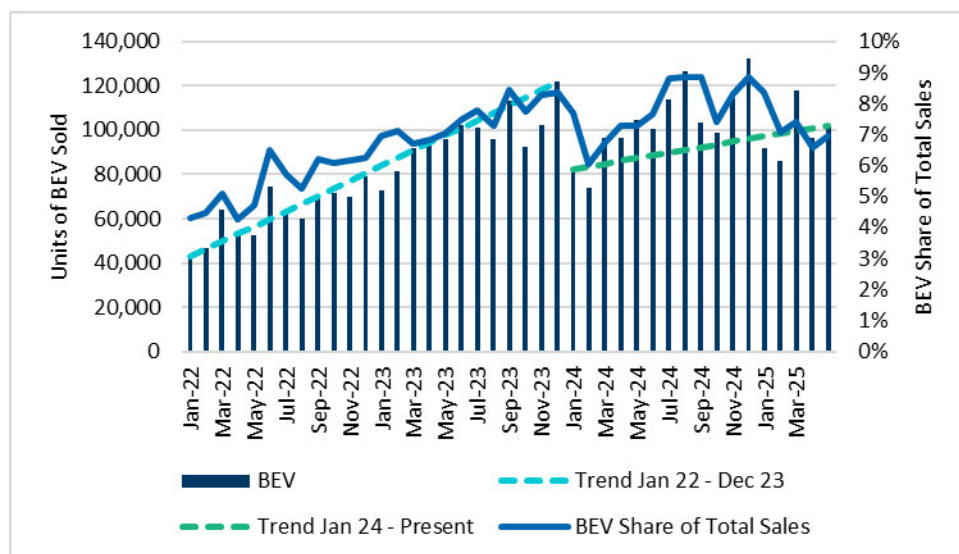
⁵⁹ International Energy Agency, "Global EV Outlook 2025," May 2025, available at <https://www.iea.org/reports/global-ev-outlook-2025>, p. 18.

vertical columns with units sold on the left axis, have declined from 2023 levels. The BEV unit sales “January 2024 to Present” trendline has also fallen in comparison to the “January 2022 to December 2023” trendline. Additionally, the BEV share of total vehicle sales, represented by a line with percentages on the right axis, has decreased in 2025 compared to 2023 levels.⁶⁰ This decline is expected to persist throughout 2025, with both BEV unit sales and their share of total vehicle sales continuing to decrease. Both metrics signal a significant slowdown in the penetration of EVs into the US auto market.⁶¹

⁶⁰ The share of BEV sales is measured as the units sold of BEVs relative to the total units sold of all Light-Duty Vehicles (“LDVs”) that is defined as car and light truck, including all powertrain types. LDVs includes all passenger cars, pickup trucks, SUVs, and light commercial vehicles (“LCVs”). For example, the US BEA estimated that in May 2025, the number of units sold of “Light Weight Vehicle Sales: Autos and Light Trucks” was 15.647 million on an annual basis, or approximately 1.3 million (15.647/12) on a monthly basis. *See* U.S. Bureau of Economic Analysis, Light Weight Vehicle Sales: Autos and Light Trucks [ALTSALES], retrieved from FRED, Federal Reserve Bank of St. Louis, June 27, 2025, available at <https://fred.stlouisfed.org/series/ALTSALES>.

⁶¹ Global EV sales continue to grow, though the growth rate in 2024 and 2025 has slightly slowed relative to the growth trend through 2023. The driver of global EV sales growth are EVs purchased by Chinese consumers. The BEV share of total sales in the European Union has stalled at below 20% for the past several years. *See* International Energy Agency, “Global EV Outlook 2025,” May 2025, available at <https://www.iea.org/reports/global-ev-outlook-2025>, p. 19. A similar stalling is occurring in the United States, as shown in Figure 3. While the oil market is global and continued Chinese adoption of EVs will reduce the global demand for oil, the economic factors most relevant for CITGO’s future profitability are the demand for transportation fuels by US drivers and the pace of adoption of EVs by US drivers.

Figure 3. US BEV Sales, January 2022 – May 2025



Source: Argonne National Laboratory, “Light Duty Electric Drive Vehicles Monthly Sales Updates - Historical Data,” accessed June 13, 2025, available at <https://www.anl.gov/esia/reference/light-duty-electric-drive-vehicles-monthly-sales-updates-historical-data>.

Notes: The different types of Electric Vehicles (“EV”) include Battery Electric Vehicles (“BEV”), Plug-in Hybrid Electric Vehicles (“PHEV”), and Hybrid Electric Vehicles (“HEV”). BEV and PHEV are jointly called Plug-In Electric Vehicles (“PEV”). The trends for PHEV and HEV are similar as the trends displayed for BEV.

41. The United States market is not an outlier in the slowdown. In December 2024, BEV unit sales in the EU stood at 144,367 units compared to 160,700 units at the same time the year before, a decrease of 10.2%.⁶² Additionally, the EU BEV share of total sales has fallen from 15% in 2023 to 14% in 2024.⁶³

42. The global trend in EV adoption is relevant for US refiners as the oil market is a global market, and demand shocks related to EV adoption have implications for oil prices (and refiner margins) in all countries. After rising rapidly for years, EV sales growth has slowed in many

⁶² ACEA, “New car registrations: +0.8% in 2024; battery-electric 13.6% market share,” January 21, 2025, accessed May 5, 2025, available at <https://www.acea.auto/pc-registrations/new-car-registrations-0-8-in-2024-battery-electric-13-6-market-share/>; ACEA, “New car registrations: +13.9% in 2023; battery electric 14.6% market share,” January 18, 2024, accessed May 5, 2025, available at <https://www.acea.auto/pc-registrations/new-car-registrations-13-9-in-2023-battery-electric-14-6-market-share/>.

⁶³ Ibid.

regions of the world.⁶⁴ This is consistent with the underlying factors identified in a Bloomberg analysis published in 2024, which highlights:⁶⁵

- Global growth in EV sales is driven by a surge in countries like China, India, and Brazil. The pace has slowed in major markets like the United States and Europe due to regulatory and political changes, and the US was affected by a lack of affordable EV models.
- Significant investments in charging infrastructure are needed to support the growing number of EVs. The report estimates that between \$1.6 trillion and \$2.5 trillion of investments will be needed for charging infrastructure by 2050 to meet global demand.

43. A 2025 analysis by Bloomberg attributes the deceleration in EV adoption to persistent consumer skepticism and high costs. In the United States, many consumers remain hesitant to purchase EVs due to concerns about the availability and reliability of the charging infrastructure.⁶⁶ Moreover, EVs continue to command a substantial price premium over internal combustion engine (ICE) vehicles, averaging 30% higher in Europe and 27% in the US.⁶⁷ This price differential has been further amplified by new tariffs implemented by both US and European governments aimed at protecting domestic automakers from Chinese EV competitors.⁶⁸

44. The 2025 Global EV Outlook, published by the International Energy Agency (IEA), projects that electric car sales in the US will account for 11% of total car sales over the full year,

⁶⁴ McKinsey & Company, “New twists in the electric-vehicle transition: A consumer perspective,” April 22, 2025, available at <https://www.mckinsey.com/features/mckinsey-center-for-future-mobility/our-insights/new-twists-in-the-electric-vehicle-transition-a-consumer-perspective>.

⁶⁵ BloombergNEF, “Electric Vehicle Sales Headed for Record Year but Growth Slowdown Puts Climate Targets at Risk, According to Bloomberg NEF Report,” June 12, 2024, accessed August 29, 2024, available at <https://about.bnef.com/blog/electric-vehicle-sales-headed-for-record-year-but-growth-slowdown-puts-climate-targets-at-risk-according-to-bloombergnef-report/>.

⁶⁶ Joshua Gallu and Wilfried Eckl-Dorna, “Electric Vehicle Sales Have Stumbled. What Went Wrong?,” BNN Bloomberg, January 17, 2025, accessed April 24, 2025, available at <https://www.bloomberg.com/news/articles/2025-01-17/electric-vehicle-sales-have-cooled-how-are-automakers-responding>.

⁶⁷ Ibid.

⁶⁸ Ibid.

a marginal increase from the 10% share recorded in 2024.⁶⁹ The report has also revised its forecast for oil displacement downward, now estimating that EV adoption will displace 5 million barrels per day (“bpd”) of oil demand by 2030, 1 million bpd lower than its 2024 estimate of 6 million bpd.⁷⁰

45. As of early 2025, EV sales have grown more slowly than major automobile manufacturers had anticipated.⁷¹ Elevated prices—ranging from 10% to 50% above those of traditional ICE vehicles—have continued to dampen broader consumer adoption.⁷² This softening demand is now influencing manufacturer’s EV strategies.⁷³ For instance, Hyundai recently revised plans for its multibillion-dollar manufacturing facility in Savannah, Georgia, shifting from an EV-exclusive focus to include hybrid vehicle production.⁷⁴

46. Any slowdown or downward revision in projected EV adoption— given EV’s role as substitutes for petroleum-fueled vehicles—has material implications for future transportation fuel demand. These shifts directly influence CITGO’s refining margins and overall valuation.

B. Petroleum Refinery Supply/Demand

1. Supply

47. On the supply-side, new refinery capacity additions are declining while closures are increasing. These trends have led to downward revisions in global refining capacity forecasts, developments that, in isolation, would be expected to support higher crack spreads.

⁶⁹ International Energy Agency, “Global EV Outlook 2025,” May 2025, available at <https://www.iea.org/reports/global-ev-outlook-2025>, pp. 11, 18.

⁷⁰ International Energy Agency, “Global EV Outlook 2025,” May 2025, available at <https://www.iea.org/reports/global-ev-outlook-2025>, p. 153; International Energy Agency, “Global EV Outlook 2024,” May 2024, available at <https://www.iea.org/reports/global-ev-outlook-2024>, p. 150.

⁷¹ Institute for Energy Research, “Proposed EV Manufacturing Facilities Are Being Cancelled Automakers,” April 17, 2025, accessed June 26, 2025, available at <https://www.instituteforenergyresearch.org/regulation/proposed-ev-manufacturing-facilities-are-being-cancelled/>.

⁷² International Energy Agency, “Global EV Outlook 2024,” May 2024, available at <https://www.iea.org/reports/global-ev-outlook-2024>, p. 13.

⁷³ Institute for Energy Research, “Proposed EV Manufacturing Facilities Are Being Cancelled Automakers,” April 17, 2025, accessed June 26, 2025, available at <https://www.instituteforenergyresearch.org/regulation/proposed-ev-manufacturing-facilities-are-being-cancelled/>.

⁷⁴ Ibid.

48. Until recently, the prevailing view was that global refining capacity would expand significantly, resulting in excess capacity and thus downward pressure on crack spreads.⁷⁵ However, the latest outlook anticipates only modest capacity growth between 2025 and 2030. This shift points to a tighter supply environment, which may bolster refining margins. Should this scenario materialize, it would have positive implications for CITGO's valuation, reflecting a more supportive market for the company's products.

49. The IEA's April 2025 *Oil Market Report* revised its short-term global oil supply growth forecast downward by 260,000 barrels per day to 1.2 million barrels per day, citing reduced output from US producers and escalating US sanctions on Venezuelan crude.⁷⁶

50. In its latest annual *Oil 2025* Report released in June 2025, the IEA forecasted that new global refining capacity will grow by 4.2 million bpd between 2024 and 2030 partly offset by 1.6 million bpd of closures. After accounting for refinery closures, the net capacity is expected to increase by only 2.5 million bpd by 2030.⁷⁷ This is lower than the estimate in *Oil 2024* which forecasted new global refining capacity to increase by 5.1 million bpd between 2023 and 2030, resulting in an average annual net capacity increase of 729 thousand bpd.⁷⁸ After accounting for refinery closures, the net capacity increase was estimated to be 3.3 million bpd by 2030.⁷⁹ According to the IEA, the pace of refining capacity growth in 2025 is significantly slower than the historical trend.⁸⁰ In 2024, an additional 0.7 billion barrels per day of capacity came online.⁸¹

51. RBN Energy forecasts a significant slowdown in refining capacity growth, with 3.7 million barrels per day of new refining capacity expected to come online between 2025 and 2029.⁸² While

⁷⁵ U.S. Energy Information Administration, "What drives petroleum product prices?" accessed April 24, 2025, available at <https://www.eia.gov/finance/markets/products/prices.php>.

⁷⁶ International Energy Agency, "Oil Market Report - April 2025," April 2025, available at www.iea.org/reports/oil-market-report-april-2025.

⁷⁷ International Energy Agency, "Oil 2025," June 2025, available at <https://www.iea.org/reports/oil-2025>, p. 101.

⁷⁸ $5.1 \text{ million} \div 7 \text{ years} = 729 \text{ thousand}$; International Energy Agency, "Oil 2024," June 2024, available at <https://www.iea.org/reports/oil-2024>, p. 91.

⁷⁹ International Energy Agency, "Oil 2024," June 2024, available at <https://www.iea.org/reports/oil-2024>, p. 86.

⁸⁰ International Energy Agency, "Oil 2025," June 2025, available at <https://www.iea.org/reports/oil-2025>, p. 101.

⁸¹ John Auers, "Running on Empty - Global Refining Capacity Expected to Grow at Slowest Pace in 30 Years," RBN Energy, February 21, 2025, accessed May 5, 2025, available at <https://rbnenergy.com/running-on-empty-global-refinery-capacity-expected-to-grow-at-slowest-pace-in-30-years>.

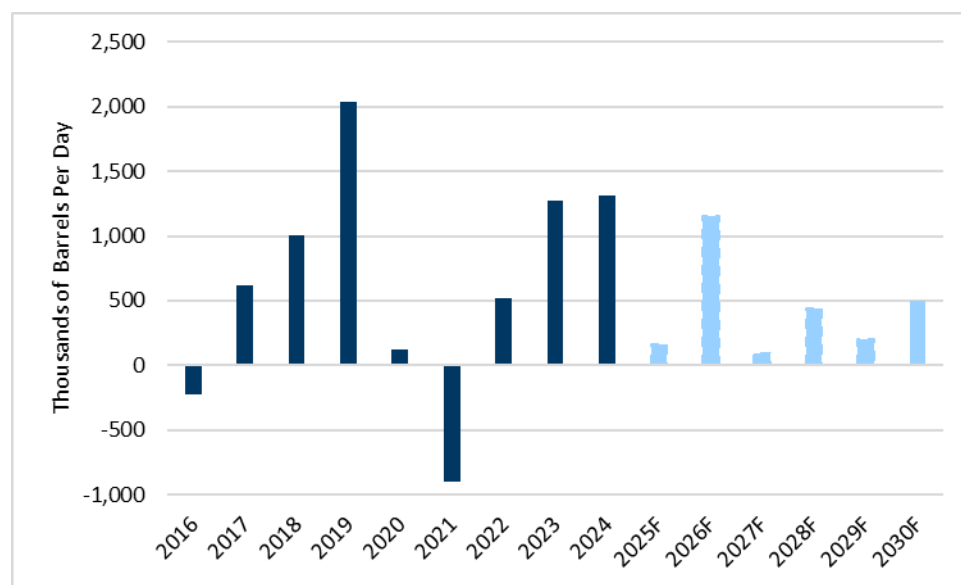
⁸² Ibid.

new refining capacity will be added, older and less economical capacity is expected to shut down, which results in a net increase of only 2.1 million barrels per day between 2025 and 2029.⁸³

52. The slowdown in investment in refining capacity is a result of the Energy Transition, climate policies and environmental, social and governance (“ESG”) initiatives. The Energy Transition is also shaping the product mix, with new refining capacity focusing more on distillates and petrochemicals, while shutdowns are likely to be primarily related to gasoline production.⁸⁴

Figure 4 below illustrates the IEA’s forecast of global refinery net capacity changes through 2030.

Figure 4. Global Refinery Net Capacity Changes, 2016–2030



Sources: [2024-2030]: International Energy Agency, “Oil 2025,” June 2025, available at <https://www.iea.org/reports/oil-2025>, p. 141; [2023]: International Energy Agency, “Oil 2024,” June 2024, available at <https://www.iea.org/reports/oil-2024>, p. 143; [2022] International Energy Agency, “Oil 2023,” June 2023, available at <https://www.iea.org/reports/oil-2023>, p. 120; [2021] International Energy Agency, “Oil 2023,” June 2023, available at <https://www.iea.org/reports/oil-2023>, estimate from p. 83; [2020] International Energy Agency, “Tables-Oil 2021,” March 2021, available at https://iea.blob.core.windows.net/assets/ed7af175-8e40-4e14-bde6-510cab88edfc/Oil2021midterm_tables.pdf, p. 8; [2019] International Energy Agency, “Oil 2020,” March 2020, available at <https://www.iea.org/reports/oil-2020>, p. 111; [2018] International Energy Agency, “Oil 2019,” March 2019, available at <https://www.iea.org/reports/oil-2019>, p. 137; [2017] International Energy Agency, “Oil 2018,” March 2018, available at <https://www.iea.org/reports/oil-2018>, p. 130; [2016] International Energy Agency, “Oil 2017,” March 2017, available at <https://www.iea.org/reports/oil-2017>, p. 140.

⁸³ Ibid.

⁸⁴ John Auers, “Slow Your Roll - How a Slower Energy Transition Might Impact Oil Producers, Refiners and Consumers,” RBN Energy, July 22, 2024, accessed July 30, 2024, available at <https://rbnenergy.com/slow-your-roll-how-a-slower-energy-transition-might-impact-oil-producers-refiners-and-consumers>.

53. The older, less economical refinery capacity that is expected to shut down includes refineries in North America, Europe, and Asia. In North America, the shutdown of the 270,000 LyondellBasell Houston refinery and the conversion of the 115,000 barrel per day Phillips 66 Rodeo refinery are expected to tighten supply. The LyondellBasell Houston refinery began its shut down in January 2025.⁸⁵ The Phillips 66 Rodeo refinery finished conversion to renewable fuel production in April 2024.⁸⁶

54. In Europe, according to industry sources, “[n]early 400,000 bpd of capacity, around 3% of Europe’s total, is scheduled for permanent closure in 2025.”⁸⁷ This comprises Petroineos’ 136,000 bpd Grangemouth refinery in Scotland which shutdown on April 29, 2025.⁸⁸ The other two refineries include Shell’s 147,000 bpd Wesseling refinery in Germany and a third of the capacity at BP’s nearby 257,000 bpd Gelsenkirchen refinery which are scheduled for 2025 closures.⁸⁹

55. In Asia, the 200,000 barrel per day No. 1 crude unit at Dalian refinery in China was set to close on June 30, 2025 signaling a close of the whole 410,000-bpd Dalian refinery.⁹⁰

56. **Table 1** below summarizes the closures that have taken place or have been announced will take place for the years 2022–2025. The largest closure is the 270,000 barrel per day LyondellBasell Houston refinery. In total, the closure of the eight refineries listed in **Table 1** below represent a loss of 1,053,000 bpd of capacity in the global supply.

⁸⁵ S&P; Erwin Seba, “Lyondell to begin closure of Houston refinery this weekend, sources say,” Reuters, January 22, 2025, accessed March 27, 2025, available at <https://www.reuters.com/business/energy/lyondell-begin-closure-houston-refinery-this-weekend-sources-say-2025-01-22/>.

⁸⁶ Al Ortiz, “Rodeo milestone marks high point in four-year journey,” Phillips 66, Press Release, April 15, 2024, accessed April 28, 2025, available at <https://www.phillips66.com/newsroom/rodeo-renewed-milestone/>.

⁸⁷ Argus Media, “Viewpoint: Europe’s refiners eye support from closures,” December 23, 2024, accessed April 28, 2025, available at <https://www.argusmedia.com/en/news-and-insights/latest-market-news/2641265-viewpoint-europe-s-refiners-eye-support-from-closures>.

⁸⁸ S&P; Robert Harvey, “Crude processing ends at Scotland’s Grangemouth oil refinery, redundancies start,” Reuters, April 29, 2025, accessed June 27, 2025, available at <https://www.reuters.com/business/energy/crude-processing-ends-scotlands-grangemouth-oil-refinery-2025-04-29/>.

⁸⁹ Argus Media, “Viewpoint: Europe’s refiners eye support from closures,” December 23, 2024, accessed April 28, 2025, available at <https://www.argusmedia.com/en/news-and-insights/latest-market-news/2641265-viewpoint-europe-s-refiners-eye-support-from-closures>.

⁹⁰ Reuters, “PetroChina to close last unit of biggest north China refinery end-June, sources say,” Reuters, June 4, 2025, accessed June 30, 2025, available at <https://www.reuters.com/business/energy/petrochina-close-last-unit-biggest-north-china-refinery-end-june-sources-say-2025-06-04/>.

Table 1. Distillation Capacity of Refinery Closures, 2022–2025

Country	PADD	State	City	Operator Name	Year	Quarter	Distillation Capacity (Thousand barrels per day)
United States	PADD III	Texas	Houston	LyondellBasell Refining	2025	1	270
China		Liaoning	Dalian	Dalian Petrochemical Co.	2025	2	200
United States	PADD V	California	Los Angeles	Phillips 66 Co.	2025	4	139
United Kingdom			Grangemouth	INEOS Petrochina JV	2025	2	136
Japan			Yamaguchi	Seibu Sekiyu K.K.	2024	1	120
Italy			Livorno	Agip Plas S.P.A	2024	2	84
China		Shandong	Binzhou	Tianhong New Energy Chem Co	2022	4	60
United States	PADD V	California	Santa Maria	Phillips 66 Co.	2023	3	45
Total							1,053

Sources: S&P Platts; *See also* Erwin Seba, “Lyondell to begin closure of Houston refinery this weekend, sources say,” Reuters, January 22, 2025, accessed March 27, 2025, available at <https://www.reuters.com/business/energy/lyondell-begin-closure-houston-refinery-this-weekend-sources-say-2025-01-22/>; Chen Aizhu and Trixie Sher Li Yap, “PetroChina set to shut top north China refinery in 2025, sources say,” Reuters, October 28, 2024, accessed March 27, 2025, available at <https://www.reuters.com/business/energy/petrochina-set-shut-top-north-china-refinery-2025-sources-say-2024-10-28/>; Robert Auers, “It’s Time to Go - What’s Behind the Planned Closure of Phillips 66’s Los Angeles Refinery?,” RBN Energy, November 1, 2024, accessed April 28, 2025, available at <https://rbnenergy.com/its-time-to-go-whats-behind-the-planned-closure-of-phillips-66s-los-angeles-refinery/>; Ron Bousso and Robert Harvey, “Scotland’s only oil refinery to close next year, 400 jobs to go,” Reuters, September 12, 2024, accessed April 28, 2025, available at <https://www.reuters.com/markets/commodities/scotlands-grangemouth-oil-refinery-close-2025-400-jobs-go-2024-09-12/>; Industrial Info Resources, “Japan’s Seibu Oil Closes Yamaguchi Refinery,” April 03, 2024, accessed April 28, 2025, available at <https://www.industrialinfo.com/news/abstract/japans-seibu-oil-closes-yamaguchi-refinery--329559>; Boris Kamchev, “Eni to Shutter Livorno Base Oil Plant,” Lubes n Greases, January 30, 2024, accessed April 28, 2025, available at https://www.lubesngreases.com/lubereport-emea/7_5/eni-to-shutter-livorno-base-oil-plant/; EnergyNews, “Sinochem closes third refinery in China due to low margins,” September 23, 2024, accessed April 28, 2025, available at <https://energynews.pro/en/sinochem-closes-third-refinery-in-china-due-to-low-margins/>; Mike Hodgson, “Phillips 66’s Santa Maria Refinery on Nipomo Mesa shuttered Friday,” Santa Maria Times, January 07, 2023, accessed April 28, 2025, available at https://santamariatimes.com/business/phillips-66-s-santa-maria-refinery-on-nipomo-mesa-shuttered-friday/article_72c6407e-27a4-577f-a02e-fe814a73a672.html.

57. In addition to closures of refineries, as described in **Table 1** above, the global capacity has been restrained by recent delays in new refinery capacity additions. Those delays, such as the 1-year delay in the 400,000 bpd Yulong refinery in China (now expected by 2025)⁹¹ and the 2-year delay in the Chennai Petroleum Corp Ltd.’s 180,000 bpd refinery in India (now expected by the end of 2027),⁹² are projected to improve refining margins for existing operators.

⁹¹ Energy News, “Sources say that China’s new refinery Yulong will test run its second crude unit by the end of March,” March 10, 2025, accessed May 9, 2025, available at <https://energynews.oedigital.com/oil-gas/2025/03/10/sources-say-that-chinas-new-refinery-yulong-will-test-run-its-second-crude-unit-by-the-end-of-march>. Yulong has two crude distillation units (CDU) which can produce 200,000 each which . “Yulong will start up its second crude distillation unit (CDU), which can produce 200,000 barrels per day”. *See also* Daisy Xu, Oceana Zhou, “China may let Shandong independent refiners share Yulong’s crude import quota,” S&P Global, July 26, 2024, accessed June 30, 2025, available at <https://www.spglobal.com/commodity-insights/en/news-research/latest-news/crude-oil/072624-china-may-let-shandong-independent-refiners-share-yulong-s-crude-import-quota>. “The trial run has been delayed again from mid-2024 to the third quarter, and it is very likely to be rescheduled to October/November.”

⁹² Nidhi Verma, “India’s Chennai Petroleum see two year delay in building new 180,000 bpd refinery,” Reuters, April 29, 2024, accessed August 27, 2024, available at <https://www.reuters.com/world/india/indias-chennai-petroleum-sees-two-year-delay-building-new-180000-bpd-refinery-2024-04-29/>.

58. Additionally, two major announced global refining capacity additions could impact the refined products market and refining margins: (a.) the 650,000 bpd Dangote refinery in Nigeria owned by the Dangote Group, West Africa's largest conglomerate; and (b.) the 340,000 bpd Dos Bocas refinery in Mexico developed by Mexico's state-owned Petróleos Mexicanos (Pemex). Currently Dangote is operating at 85% capacity and Dos Bocas is operating at 17.5% capacity.⁹³ Dangote was expected to reach full capacity in March 2025⁹⁴ while Dos Bocas is not expected to reach full capacity before 2026.⁹⁵ Global refinery capacity additions typically assume that facilities will start up and immediately operate at reasonable utilization levels. Dangote and Dos Bocas are exceptions since they both commenced operations in 2024 and yet still face significant production challenges, limiting their impact on global supply and demand balances.

(a) Dangote Refinery

59. The world's seventh largest Dangote refinery began processing crude oil into diesel and aviation fuels in 2024 after years of delays and cost overruns.⁹⁶ Initially proposed in 2013 with a planned start-up in 2016,⁹⁷ construction began in 2017, and production commenced in January

⁹³ Scott Squires, "Mexico's \$20 Billion Refinery Flops as Trump Threatens Oil Tariffs," BNN Bloomberg, January 23, 2025, accessed April 28, 2025, available at <https://www.bnnbloomberg.ca/business/international/2025/01/23/mexicos-20-billion-refinery-flops-as-trump-threatens-oil-tariffs/>; BIC Magazine, "Nigeria's 650,000 bpd Dangote Refinery to operate at full capacity in 30 days," February 11, 2025, accessed April 28, 2025, available at <https://www.bicmagazine.com/industry/refining-petrochem/nigerias-650-000-bpd-dangote-refinery-to-operate-at-full-capacity-30-days>.

⁹⁴ Isaac Anyaogu, "Nigeria's Dangote Refinery to operate at full capacity in 30 days, executive says," February 10, 2025, accessed April 28, 2025, available at <https://www.reuters.com/business/energy/nigerias-dangote-refinery-operate-full-capacity-30-days-executive-says-2025-02-10>.

⁹⁵ Kristen Hays, "Here I Go Again - Pemex's Dos Bocas Refinery Still Facing the Startup Blues," RBN Energy, April 17, 2024, accessed July 30, 2024, available at <https://rbnenergy.com/here-i-go-again-pemex-dos-bocas-refinery-still-facing-the-startup-blues>.

⁹⁶ Kristen Hays, "Almost There - Nigeria's Dangote Refinery Likely Facing A Long, Slow Ramp-up," RBN Energy, May 2, 2024, accessed July 30, 2024, available at <https://rbnenergy.com/almost-there-nigerias-dangote-refinery-faces-a-long-slow-ramp-up>.

⁹⁷ Id., Sheela Tobben, "Stranger in Town - Nigeria Turning to U.S. Crudes to Feed Dangote Refinery," RBN Energy, May 31, 2024, accessed July 30, 2024, available at <https://rbnenergy.com/stranger-in-town-nigeria-turning-to-us-crudes-to-feed-dangote-refinery>.

2024.⁹⁸ The project aimed to transition Nigeria from a refined product importer to an exporter.⁹⁹ Over the first few months of 2025, it has operated its single crude distillation unit at 85% of capacity.¹⁰⁰ It houses the largest single-train atmospheric crude unit in the world.¹⁰¹ The Dangote refinery's single large crude distillation unit presents a unique risk: operations have to halt without a backup when the unit shuts down.¹⁰² Most refineries have multiple units to ensure continuous processing even when other units are down. Additionally, the refinery is optimized to process light or medium density sweet crudes, in line with Nigeria's crude oil production.¹⁰³ However, sourcing Nigerian crude may be challenging since it typically sells at a premium to Brent crude,¹⁰⁴ making it more attractive for export. Nigeria's crude oil production has faced disruptions, making it challenging for local refineries to maintain a stable supply. Since beginning operations, the Dangote refinery has struggled to secure feedstock¹⁰⁵ and has had to rely on imports from the United States, which typically takes two weeks for delivery.¹⁰⁶ Crude imports could be further complicated by the Organization of the Petroleum Exporting Countries' (OPEC) production cuts tightening global supply. Nigeria has four other refineries operated by Nigeria's state-owned oil company, Nigerian National Petroleum Corporation, but they have historically experienced

⁹⁸ Reuters, "Nigeria's Dangote refinery starts production after years of delays," January 13, 2024, accessed May 5, 2025, available at <https://www.reuters.com/markets/commodities/nigerias-dangote-refinery-starts-production-after-years-delays-2024-01-13>.

⁹⁹ Ibid; Adekunle Agbetiloye, "Aliko Dangote offers to sell \$20 billion oil refinery to NNPC," Business Insider Africa, July 22, 2024, accessed August 29, 2024, available at <https://africa.businessinsider.com/local/markets/aliko-dangote-offers-to-sell-dollar20-billion-oil-refinery-to-nnpcc/lcx81zb>.

¹⁰⁰ BIC Magazine, "Nigeria's 650,000 bpd Dangote Refinery to operate at full capacity in 30 days," February 11, 2025, accessed April 28, 2025, available at <https://www.bicmagazine.com/industry/refining-petrochem/nigerias-650-000-bpd-dangote-refinery-to-operate-at-full-capacity-30-days>.

¹⁰¹ Kristen Hays, "Almost There - Nigeria's Dangote Refinery Likely Facing A Long, Slow Ramp-up," RBN Energy, May 2, 2024, accessed July 30, 2024, available at <https://rbnenergy.com/almost-there-nigerias-dangote-refinery-faces-a-long-slow-ramp-up>.

¹⁰² Ibid.

¹⁰³ Sheela Tobben, "Stranger in Town - Nigeria Turning to U.S. Crudes to Feed Dangote Refinery," RBN Energy, May 31, 2024, accessed August 27, 2024, available at <https://rbnenergy.com/stranger-in-town-nigeria-turning-to-us-crudes-to-feed-dangote-refinery>.

¹⁰⁴ Ibid.

¹⁰⁵ Adekunle Agbetiloye, "Aliko Dangote offers to sell \$20 billion oil refinery to NNPC," Business Insider Africa, July 22, 2024, accessed August 29, 2024, available at <https://africa.businessinsider.com/local/markets/aliko-dangote-offers-to-sell-dollar20-billion-oil-refinery-to-nnpcc/lcx81zb>.

¹⁰⁶ Sheela Tobben, "Stranger in Town - Nigeria Turning to U.S. Crudes to Feed Dangote Refinery," RBN Energy, May 31, 2024, accessed August 27, 2024, available at <https://rbnenergy.com/stranger-in-town-nigeria-turning-to-us-crudes-to-feed-dangote-refinery>.

shutdowns and operational instability.¹⁰⁷ The government has struggled to improve refinery performance due to challenges in securing skilled labor to operate and maintain refineries. As a result, the Dangote refinery has had to hire operators from India.¹⁰⁸

60. The projections for the refinery's operational timeline have evolved over time, with each subsequent update further delaying the anticipated date for full operations. Three independent reports estimated full operations from 2025–2028. First, in *Oil 2025* (dated June 2025), the IEA offers the most recent account of the refinery processing crude in the first half of 2024 and expecting throughput to stabilize at above 70% of capacity by late 2025.¹⁰⁹ Second, RBN Energy's 2024 analysis estimated that full capacity will not be reached before 2026 citing the refinery's scale, Nigeria's unstable refinery sector, and the operators' inexperience.¹¹⁰ Third, the International Monetary Fund also projected that the Dangote Refinery will process 400,000 barrels per day (62% of its capacity) by 2028.¹¹¹

61. Since its commissioning in January 2024, the Dangote refinery has primarily relied on Nigerian crude supplied by the state oil company, Nigerian National Petroleum Company Limited ("NNPC Limited").¹¹² However, persistent volatility in domestic supply and the need to look beyond the light, sweet Nigerian crude for which the refinery was originally designed have prompted a strategic shift.¹¹³ The refinery is now actively diversifying its feedstock, increasingly sourcing crude internationally—including recent imports from Brazil and plans to add suppliers

¹⁰⁷ Kristen Hays, "Almost There - Nigeria's Dangote Refinery Likely Facing A Long, Slow Ramp-up," RBN Energy, May 2, 2024, accessed July 30, 2024, available at <https://rbnenergy.com/almost-there-nigerias-dangote-refinery-faces-a-long-slow-ramp-up>.

¹⁰⁸ Ibid.

¹⁰⁹ International Energy Agency, "Oil 2025," June 2025, available at <https://www.iea.org/reports/oil-2025>, p. 110.

¹¹⁰ Kristen Hays, "Almost There - Nigeria's Dangote Refinery Likely Facing A Long, Slow Ramp-up," RBN Energy, May 2, 2024, accessed July 30, 2024, available at <https://rbnenergy.com/almost-there-nigerias-dangote-refinery-faces-a-long-slow-ramp-up>.

¹¹¹ $(400,000 \div 650,000) * 100 = 62\%$; International Monetary Fund, "Nigeria: 2024 Article IV Consultation-Press Release; Staff Report; Staff Statement; and Statement by the Executive Director for Nigeria, International Monetary Fund – African Dept.," May 9, 2024, available at <https://www.elibrary.imf.org/view/journals/002/2024/102/article-A001-en.xml>, p. 73.

¹¹² Kelly Norways, "Nigeria's Dangote refinery buys first crude oil from Brazil, Equatorial Guinea.," S&P Global, March 28, 2025, accessed April 28, 2025, available at <https://www.spglobal.com/commodity-insights/en/news-research/latest-news/refined-products/032825-nigerias-dangote-refinery-buys-first-crude-oil-from-brazil-equatorial-guinea>.

¹¹³ Ibid.

from Equatorial Guinea—to enhance reliability and reduce dependence on a single source.¹¹⁴ This strategic shift has led to adjustments in the refinery’s operational timeline. According to a February 2025 update from S&P Global Commodity Insights, the refinery was operating at approximately 85% of its capacity and, as stated by a company executive, was expected to reach full crude throughput by March 2025.¹¹⁵ Based on recent information, the refinery has still not reached full crude throughput as of May 2025.¹¹⁶

(b) Dos Bocas Refinery

62. Announced in 2018, Pemex’s Dos Bocas refinery began construction in 2019 with an initial startup target of 2022.¹¹⁷ The refinery was intended to reduce Mexico’s reliance on the imports of US refined products. Government officials set ambitious targets to get Mexico closer to becoming energy self-sufficient, particularly before the 2024 presidential elections. While Mexico operates six other refineries, these legacy refineries collectively run at nearly half of their total capacity due to aging infrastructure and unreliable crude processing.¹¹⁸

63. Since 2023, Pemex and government representatives have repeatedly claimed that the Dos Bocas refinery would soon begin operations and reach full capacity in the near future. In 2024, engineers reported that key components, including the fluid catalytic cracking plant, the hydrodesulfurization plant, and the coker plant, require significant work.¹¹⁹ As of the end of

¹¹⁴ Ibid.

¹¹⁵ S&P Global Platts Connect, “REFINERY NEWS: Nigeria's Dangote aiming to reach capacity in month,” February 10, 2025, accessed April 28, 2025, available at <https://plattsconnect.spglobal.com/#platts/newsArticle?articleID=c76b2c71-b4e2-40f0-8a9e-b16ceee5c28a>.

¹¹⁶ Reuters, “Nigeria's Dangote oil refinery extends WTI buying spree into July,” May 30, 2025, accessed June 27, 2025, available at <https://www.reuters.com/business/energy/nigerias-dangote-refinery-continues-wti-buying-spreec-july-2025-05-30/>.

¹¹⁷ Kristen Hays, “Here I Go Again - Pemex's Dos Bocas Refinery Still Facing the Startup Blues,” RBN Energy, April 17, 2024, accessed July 30, 2024, available at <https://rbnenergy.com/here-i-go-again-pemex-dos-bocas-refinery-still-facing-the-startup-blues>.

¹¹⁸ The Rio Times, “Mexico’s Refinery Dream Falts as Pemex Struggles,” March 26, 2025, accessed April 28, 2025, available at <https://www.riotimesonline.com/mexicos-refinery-dream-falts-as-pemex-struggles>.

¹¹⁹ Adriana Barrera and Stefanie Eschenbacher, “Exclusive: Mexico's new Pemex refinery still needs important work, is far from ready, sources say,” June 24, 2024, accessed August 27, 2024, available at <https://www.reuters.com/business/energy/mexicos-new-pemex-refinery-still-needs-important-work-is-far-ready-sources-say-2024-06-24/>.

December 2024, the refinery was processing fuels at 17.5% capacity and much of it has been ultra-low sulfur diesel produced from already-refined diesel stock.¹²⁰ The Dos Bocas refinery has faced significant cost overruns, with its original \$8 billion USD estimate surpassing \$20 billion USD as of January 2025.¹²¹

64. The projections for the refinery's operational timeline have evolved over time, with each subsequent update further delaying the anticipated date for full operations. According to RBN Energy in 2024, consistent operations were not expected until 2026 with full capacity reached by 2028.¹²² The *Oil 2025* report projects that the refinery is ramping up as of June 2025, and is expected to reach full operations in 2026.¹²³

65. An interview in March 2025 with the company's executive mentioned the refinery will likely reach its full processing capacity of 340,000 barrels per day by the end of 2026.¹²⁴ However, recent operations have been under scrutiny due to technical and financial issues. Operations were suspended in early 2025 due to a lack of suitable crude oil, specifically issues with the supply's high salt content.¹²⁵ Further, Mexico's 2025 budget reduced allocation to Pemex by 7.5%.¹²⁶ This jeopardizes the refinery's production targets and increases Mexico's risk of crude oil imports due to insufficient investments in oil resource exploitation.¹²⁷ Additionally, the power plant supplying electricity to the refinery has encountered reliability issues, leading the Energy Regulatory

¹²⁰ Scott Squires, "Mexico's \$20 Billion Refinery Flops as Trump Threatens Oil Tariffs," BNN Bloomberg, January 23, 2025, accessed April 28, 2025, available at <https://www.bnnbloomberg.ca/business/international/2025/01/23/mexicos-20-billion-refinery-flops-as-trump-threatens-oil-tariffs/>.

¹²¹ Ibid.

¹²² Kristen Hays, "Here I Go Again - Pemex's Dos Bocas Refinery Still Facing the Startup Blues," RBN Energy, April 17, 2024, accessed July 30, 2024, available at <https://rbnenergy.com/here-i-go-again-pemex-dos-bocas-refinery-still-facing-the-startup-blues>.

¹²³ International Energy Agency, "Oil 2025," June 2025, available at <https://www.iea.org/reports/oil-2025>, p. 107.

¹²⁴ Reuters, "Mexico's Pemex prioritizes refining as it diverts heavy oil away from Gulf," March 11, 2025, accessed April 24, 2025, available at <https://www.reuters.com/business/energy/ceraweek-mexico-keep-diverting-heavy-oil-away-gulf-refining-ramps-up-pemexs-pmi-2025-03-11/>.

¹²⁵ MNIMarkets, "Americas Oil: Pemex Shuts Dos Bocas on Lack of Refinery-Ready Oil," January 29, 2025, accessed April 28, 2025, available at <https://www.mnimarkets.com/articles/pemex-shuts-dos-bocas-on-lack-of-refinery-ready-oil-1737574598101>.

¹²⁶ Energy News, "Pemex Faces an Uncertain Future with a Tight Budget for 2025," November 25, 2024, accessed May 5, 2025, available at <https://energynews.pro/en/pemex-faces-an-uncertain-future-with-a-tight-budget-for-2025>.

¹²⁷ Ibid.

Commission (CRE) to grant a two-year extension for performance tests, pushing the expected commercial operation to October 2026.¹²⁸

66. Notably, no new fossil fuel refining capacity is planned or forecasted in the United States, the European Union, or China, aside from a delayed petrochemical project in China. Combined with the uncertainty surrounding the output from the Dangote and Dos Bocas refineries, this limited expansion in global refining capacity will likely constrain supply in the short-to-medium term.

2. Demand

67. The slowdown in investment in refining capacity stems from previous forecasts predicting that petroleum product demand would peak and then plateau. Given the long lead time required to design and build a new refinery, along with the extended period needed to recover such large investment, refiners have been hesitant to commit to new projects, particularly in an uncertain demand environment.

68. IEA's recent April 2025 *Oil Market Report* revised its global oil demand growth projections downward to 730,000 barrels per day in 2025 and further reduced the 2026 estimate to 690,000 barrels per day.¹²⁹ The adjustments reflect escalating trade tensions and a deteriorating economic outlook, which are expected to curb consumption.¹³⁰

69. According to the *Oil 2025*, the demand for refined products will reach 85.9 million barrels per day by 2030.¹³¹ **Figure 5** below presents the global petroleum liquids medium-term oil demand forecasts from RBN Energy, the OPEC, and the IEA. The IEA predicts that global petroleum liquids oil demand will peak in 2029, while RBN expects global petroleum liquids oil demand to

¹²⁸ MNIMarkets, "Americas Oil: Mexico's Dos Bocas Refinery Faces Power Woes in Latest Snag," January 29, 2025, accessed June 30, 2025, available at <https://www.mnimarkets.com/articles/mexicos-dos-bocas-refinery-faces-power-woes-in-latest-snap-1738178759874>.

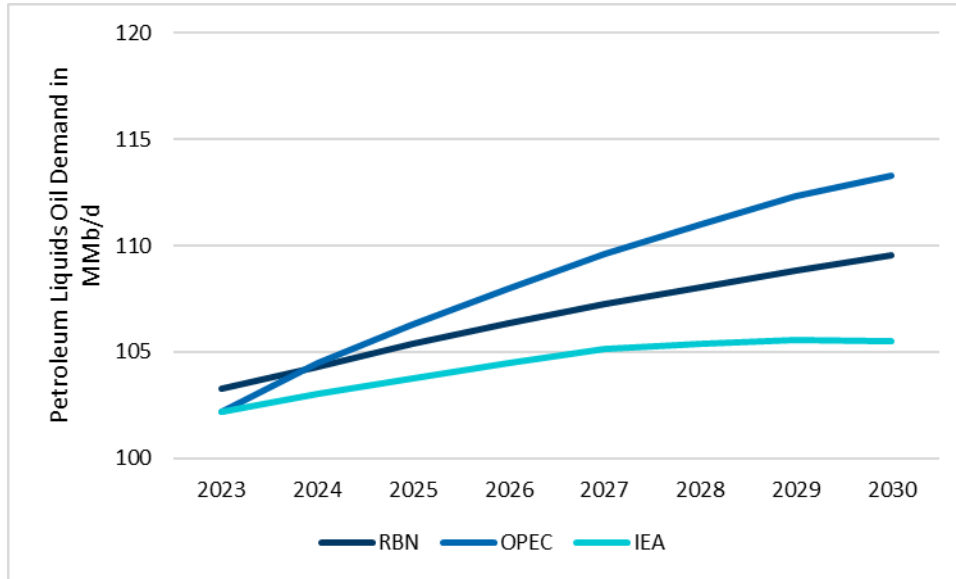
¹²⁹ International Energy Agency, "Oil Market Report - April 2025," April 2025, available at www.iea.org/reports/oil-market-report-april-2025.

¹³⁰ Ibid.

¹³¹ International Energy Agency, "Oil 2025," June 2025, available at <https://www.iea.org/reports/oil-2025>, p. 86.

continue to grow in the medium term and peak in the first half of 2040s, and OPEC forecasts a 0.6% compound annual growth rate (CAGR) through 2050.¹³²

Figure 5. Global Petroleum Liquids Medium-Term Oil Demand Forecasts to 2030



Sources: RBN Energy, “RFA Future of Fuels,” Report, January 2025, Appendix 2, Liquid Products Demand Forecast, available at <https://rbnenergy.com/products/future-of-fuels>, p. 58; Organization of the Petroleum Exporting Countries, “World Oil Outlook 2050,” 2024, Chapter 3 Tables, Table 3.1 and 3.2, available at <https://publications.opec.org/woo/chapter/129/2356>; International Energy Agency, “Oil 2025,” June 2025, Table 2, Summary of Global Oil Demand, available at <https://www.iea.org/reports/oil-2025>, p. 136.

70. **Figure 6** below presents global petroleum liquids long-term oil demand forecasts.¹³³ IEA forecasts, contained in the *Oil 2025* report, are available only through 2030. However, IEA’s 2024 World Energy Outlook (WEO) reports global liquids demand for 2030, 2035 and 2050. Thus, the

¹³² RBN Energy, “RFA Future of Fuels,” Report, January 2025, p. 58, Appendix 2, Liquid Products Demand Forecast, available at <https://rbnenergy.com/products/future-of-fuels>; OPEC, “World Oil Outlook 2050,” 2024, Chapter 3, Table 3.2, available at <https://publications.opec.org/woo/chapter/129/2356>; (OPEC Oil demand in 2023 = 102.2 mbpd, OPEC Oil demand in 2050 = 120.1 mbpd, Growth between 2023-2050 = 17.9 mbpd; Compound Annual Growth Rate (CAGR) is calculated as $((120.1 / 102.2)^{(1 / 27)} - 1) = 0.6\%$; International Energy Agency, “Oil 2025,” June 2025, available at <https://www.iea.org/reports/oil-2025>, p. 86.

¹³³ RBN Energy, “RFA Future of Fuels,” Report, January 2025, p. 58, Appendix 2, Liquid Products Demand Forecast, available at <https://rbnenergy.com/products/future-of-fuels>, p. 58; OPEC, “World Oil Outlook 2050,” 2024, Chapter 3, available at <https://publications.opec.org/woo/chapter/129/2356>; International Energy Agency, “2024 World Energy Outlook,” p. 316, available at <https://www.iea.org/reports/world-energy-outlook-2024>.

IEA's WEO long-term liquids demand forecast has been included in **Figure 6** as reference.¹³⁴ The OPEC projects oil demand for petroleum liquids to continue rising to about 113.3 million barrels per day in 2030, and 118.9 million barrels per day in 2045, forecasts that contrast with more aggressive energy transition scenarios such as the one presented by the IEA's 2024 WEO, where we observe a decrease in global liquids demand.¹³⁵

71. On the demand side, the consensus is that the global oil demand for liquid fuels is not expected to peak until 2040–2045, later than previously predicted. OPEC doesn't project a peak in global petroleum liquids oil demand before 2045, while forecasts from RBN Energy project a peak around 2040.¹³⁶ The IEA anticipates global oil demand to peak in 2029.¹³⁷ It argued in 2024 that the oil industry is investing twice the amount necessary under its forecast scenario,¹³⁸ which could hinder climate targets. The IEA forecasts integrate energy security and has shifted its focus in recent years towards advocating for renewable energy and climate change mitigation to align demand with those targets, rather than providing a purely feasibility-based projection of actual oil demand.¹³⁹

¹³⁴ As highlighted in the IEA's 2024 World Energy Outlook, differences in methodology may account for variations in reported figures and discrepancies with other EIA's Oil Market Reports. *See* International Energy Agency, "2024 World Energy Outlook," October, 2024, available at <https://www.iea.org/reports/world-energy-outlook-2024>, p. 137, Notes of Table 3.1.

¹³⁵ Organization of the Petroleum Exporting Countries, "World Oil Outlook 2050," 2024, available at <https://publications.opec.org/woo/chapter/129/2356>.

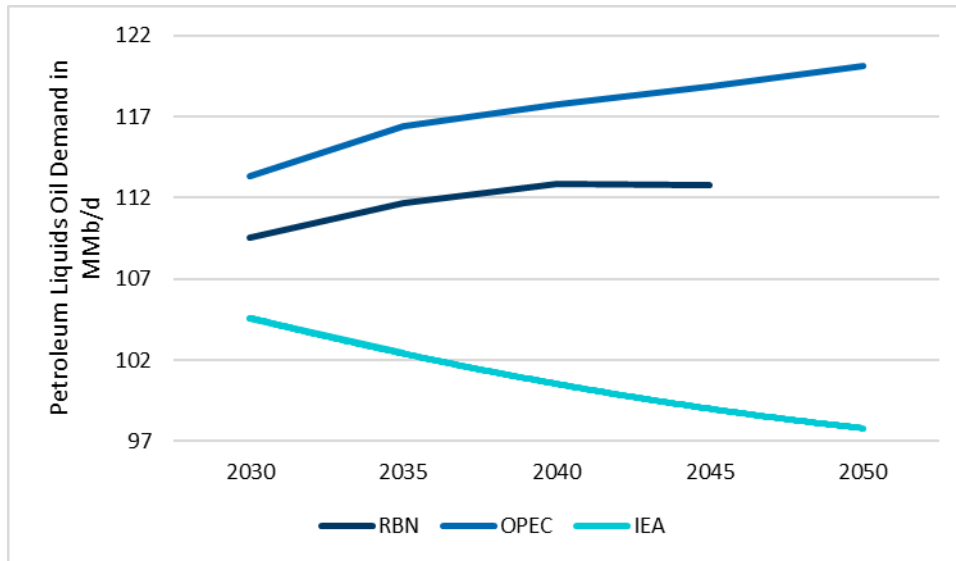
¹³⁶ Organization of the Petroleum Exporting Countries, "World Oil Outlook 2050," 2024, Chapter 3, available at <https://publications.opec.org/woo/chapter/129/2356>; RBN Energy, "RFA Future of Fuels," Report, January 2025, available at <https://rbnenergy.com/products/future-of-fuels>, p. 58.

¹³⁷ International Energy Agency, "Oil 2025," June 2025, available at <https://www.iea.org/reports/oil-2025>, p. 86.

¹³⁸ International Energy Agency, "The Oil and Gas Industry in Net Zero Transitions," November 2023, available at <https://www.iea.org/reports/the-oil-and-gas-industry-in-net-zero-transitions>, p. 14. "Continued investment in oil and gas supply is needed in all scenarios, but the USD 800 billion it currently invests each year is double what is required in 2030 to meet declining demand in a 1.5 °C scenario."

¹³⁹ Abhijeet Kumar, "Opec vs IEA: Diverging oil demand forecasts signal an uncertain future," September 10, 2024, accessed April 28, 2025, available at https://www.business-standard.com/economy/news/opec-vs-iea-diverging-oil-demand-forecasts-signal-an-uncertain-future-124091001319_1.html.

Figure 6. Global Petroleum Liquids Long-Term Oil Demand Forecasts to 2050



Sources: RBN Energy, “RFA Future of Fuels,” Report, January 2025, Appendix 2, Liquid Products Demand Forecast, available at <https://rbnenergy.com/products/future-of-fuels>, p. 58; ORGANIZATION OF THE PETROLEUM EXPORTING COUNTRIES, “World Oil Outlook 2050,” 2024, Charter 3, Table 3.2, available at <https://publications.opec.org/woo/chapter/129/2356>; International Energy Agency, “2024 World Energy Outlook,” available at <https://www.iea.org/reports/world-energy-outlook-2024>, p. 316.

Notes: The RBN forecast does not include data for 2050. The IEA’s 2024 World Energy Outlook provides forecasts only for 2030, 2035, and 2050. The 2040 and 2045 IEA data points shown are representative trends only.

72. According to the IEA, the oil demand in developing regions including Africa, and Asia is expected to continue growing.¹⁴⁰ Overall, the IEA forecasts global oil demand to peak in 2029, attributing this slowdown to factors such as slower population and economic growth and substitution away from oil in the transport and power generation sectors.¹⁴¹ Developing regions, particularly the Asia-Pacific, will drive global oil demand growth, offsetting declines in advanced economies such as the United States and Europe.¹⁴² **Figure 7** below illustrates the IEA regional oil demand growth forecast.¹⁴³

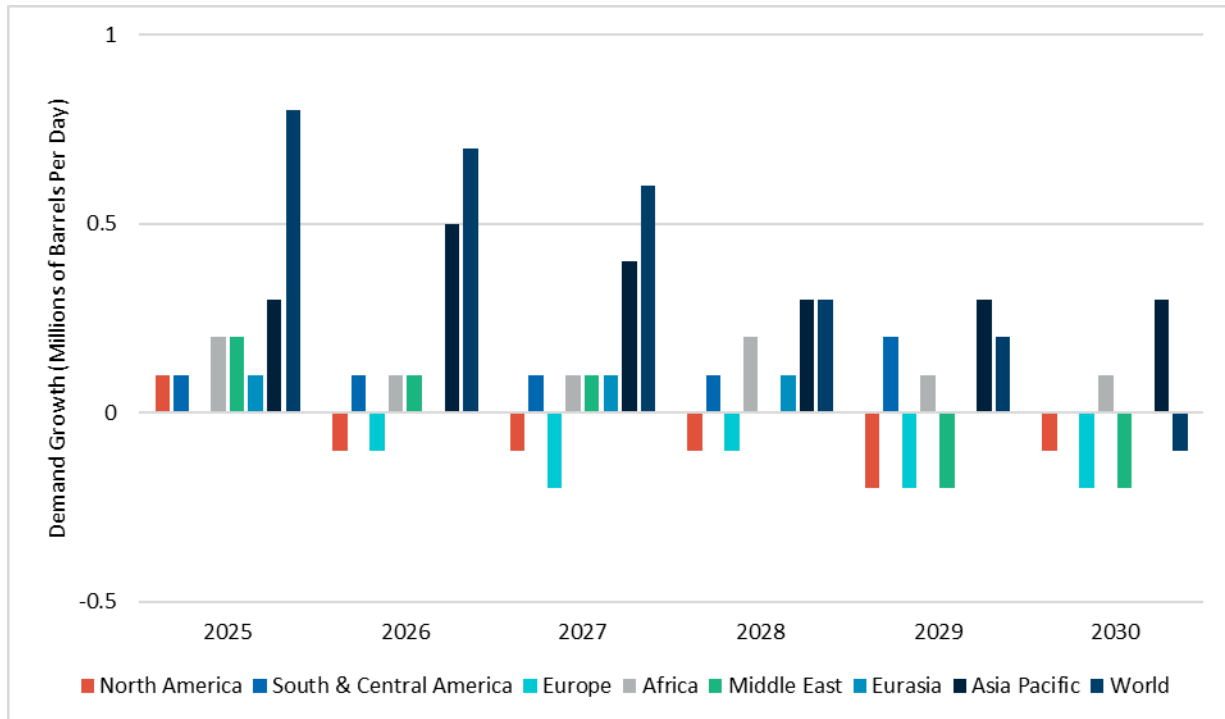
¹⁴⁰ International Energy Agency, “Oil 2025,” June 2025, available at <https://www.iea.org/reports/oil-2025>, p. 13.

¹⁴¹ Id., pp. 11, 133.

¹⁴² Id., pp. 36, 37.

¹⁴³ Id., p. 12.

Figure 7. Regional Growth in Oil Demand, 2025–2030



Source: International Energy Agency, “Oil 2025,” June 2025, available at <https://www.iea.org/reports/oil-2025>, p. 12.

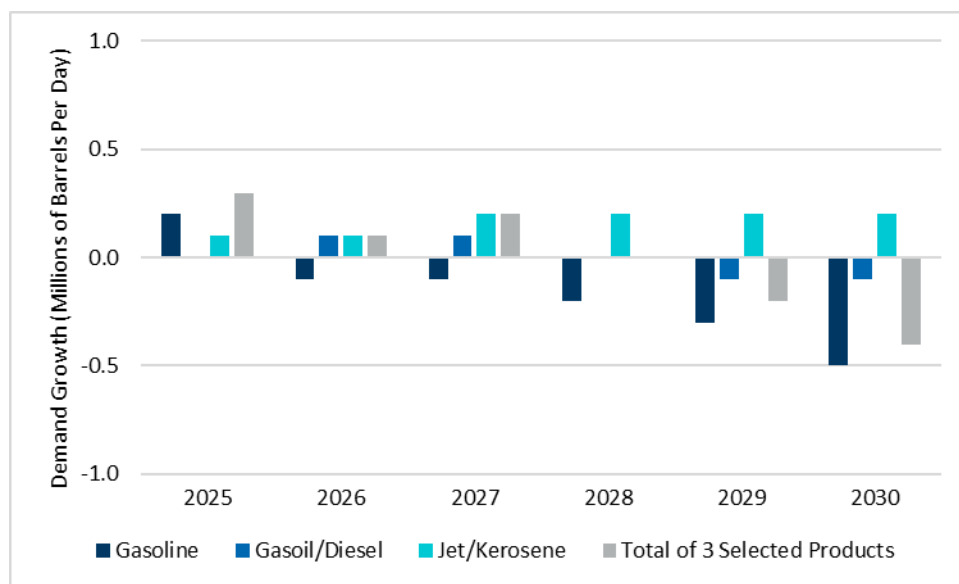
73. While the IEA forecasts global oil demand to peak in 2029, the mix of fuels demanded by consumers will follow different growth trajectories. Jet fuel demand is expected to remain strong due to their essential roles in transportation and logistics.¹⁴⁴ Within liquid fuels, gasoline demand is expected to peak earlier than middle distillate demand because light-duty vehicles are easier to electrify than heavy-duty vehicles.¹⁴⁵ **Figure 8** below illustrates global demand growth by refined product category.¹⁴⁶

¹⁴⁴ Id., p. 34.

¹⁴⁵ Id., p. 15.

¹⁴⁶ Id., p. 15.

Figure 8. Global Demand Growth by Product Category, 2024–2030



Source: International Energy Agency, “Oil 2025,” June 2025, available at <https://www.iea.org/reports/oil-2025>, p. 15.

74. Analyst reports predict a slower energy transition than the IEA’s. In turn, RBN Energy forecasts that gasoline demand will peak before 2035, increasing overall by 100 thousand barrels per day from 2023 to 2045, while middle distillates demand will not peak before 2045, rising by 7.7 million barrels per day between 2023 and 2045.¹⁴⁷

75. An OPEC analysis in 2024 highlights several factors contributing to the consensus view of a slower Energy Transition:

- Non-OECD countries, particularly China and India, are expected to drive significant oil demand growth due to rising populations, expanding middle classes, and economic growth.
- Strong energy demand growth in developing countries may necessitate continued reliance on fossil fuels to ensure energy security and access.

¹⁴⁷ John Auers, “Slow Your Roll - How a Slower Energy Transition Might Impact Oil Producers, Refiners and Consumers,” RBN Energy, July 22, 2024, accessed July 30, 2024, available at <https://rbnenergy.com/slow-your-roll-how-a-slower-energy-transition-might-impact-oil-producers-refiners-and-consumers>.

- Scaling up renewable energy infrastructure faces significant challenges, including grid reliability, battery production capacity, and access to critical minerals, potentially slowing the Energy Transition, and supporting demand for CITGO's products in the medium to long term.
- There is growing consumer and political pushback against ambitious net-zero policies that are perceived as unrealistic and economically disruptive. This resistance is prompting some countries to reassess their energy strategies, including renewed support for oil and gas exploration and production projects.¹⁴⁸

76. Most major net CO₂ emissions projections, even “Ambitious Climate” scenarios consistent with limiting global warming to 1.5°C by 2100, indicate substantial fossil fuel consumption through at least 2045:

- Net CO₂ emissions slowly decline in “Ambitious Climate” scenarios and remain substantial through midcentury and beyond.
- Energy demand growth differs between nations. Demand in high-income nations is falling, and consumption continues to grow in low-income nations.¹⁴⁹

77. These factors explain why the OPEC predicts there will be no major drop in demand, and global oil demand may witness a long plateau.¹⁵⁰

C. The Energy Transition

78. A growing consensus recognizes that significant real-world obstacles hinder a rapid transition to non-hydrocarbon energy sources, necessitating continued reliance on refined

¹⁴⁸ EA Forum, “OPEC Sec Gen: Peak Oil Demand Not on the Horizon,” June 13, 2024, accessed August 27, 2024, available at <https://www.opec.org/assets/assetdb/peak-oil-demand-not-on-the-horizon-2024.pdf>.

¹⁴⁹ Yuqi Zhu, Daniel Raimi, Emily Joiner, Brandon Holmes, and Brian C. Prest, “Global Energy Outlook 2025: Headwinds and Tailwinds in the Energy Transition?,” Resources for the Future, April 2025, available at <https://www.rff.org/publications/reports/global-energy-outlook-2025/>.

¹⁵⁰ Rong wei Neo and Sambit Mohanty, “Oil demand may witness long plateau, but no abrupt fall seen: Aramco's CEO Nasser,” Forbes, October 21, 2024, accessed May 13, 2025, available at <https://www.spglobal.com/commodity-insights/en/news-research/latest-news/crude-oil/102124-oil-demand-may-witness-long-plateau-but-no-abrupt-fall-seen-aramcos-ceo-nasser>.

products. This has substantial implications for CITGO's valuation, suggesting sustained demand for its products in the medium to long term. For example, S&P Global notes:

- There is more uncertainty in energy markets heading into 2025 than any year since the pandemic.
- Recent geopolitical events, such as the conflicts in Ukraine and Gaza remain unresolved and have the potential to significantly alter energy markets. This underscores the need for stable and affordable energy supplies, which current renewable technologies cannot fully guarantee. A rapid shift away from fossil fuels would lead to high economic costs and potential energy shortages.
- Polarization and geopolitical rivalry between China and the West are becoming more pronounced. China is leveraging its leading position in clean technology for greater global influence, while the US and Europe enhance tariffs to protect domestic industry.¹⁵¹

79. In June 2024, the World Economic Forum (WEF) published its 14th annual report on the Global Energy Transition Report, entitled "Fostering Effective Energy Transition 2024."¹⁵² This landmark report finds that while the global energy transition is advancing, its momentum has slowed due to increasing global uncertainty.¹⁵³ The Energy Transition Index (ETI), which benchmarks 120 countries on their current energy system performance and readiness highlights progress in energy efficiency and the adoption of clean energy sources. However, it also notes that various challenges are holding back energy transition efforts.

80. The WEF defines its Energy Transition Index as follows:¹⁵⁴

The Energy Transition Index (ETI), which is an evolution of 14 years of country-level energy system benchmarking, provides a data-driven framework to foster

¹⁵¹ S&P Global, "S&P Global Commodity Insights Releases its 2025 Energy Outlook," December 11, 2024, accessed April 28, 2025, available at <https://www.spglobal.com/commodityinsights/pt/about-commodityinsights/media-center/press-releases/2024/121124-s-p-global-commodity-insights-releases-its-2025-energy-outlook>.

¹⁵² World Economic Forum, "Fostering Effective Energy Transition Insight Report," June, 2024, available at https://www3.weforum.org/docs/WEF_Fostering_Effective_Energy_Transition_2024.pdf.

¹⁵³ Id., p. 3.

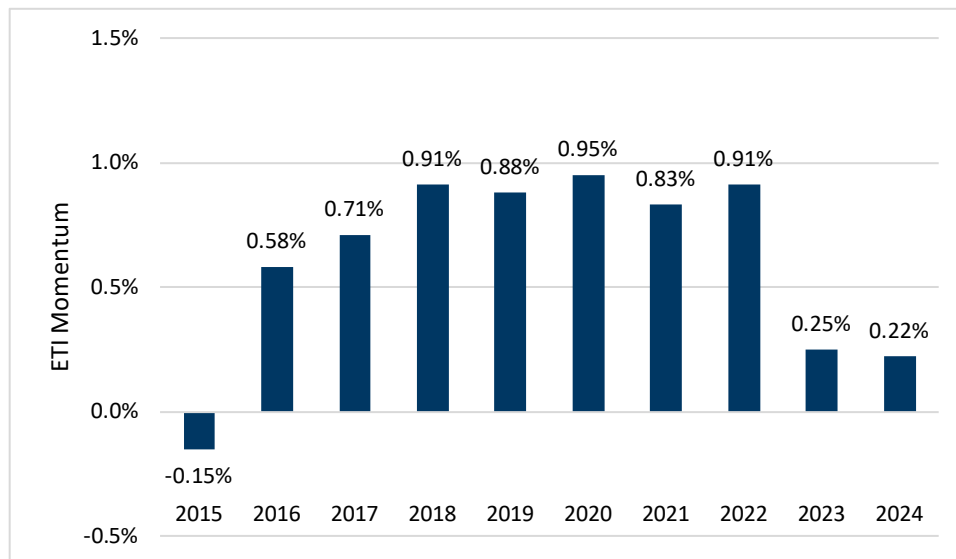
¹⁵⁴ Id., p. 9.

understanding of the performance and readiness of global energy systems for the transition. The ETI covers 120 countries in terms of their current energy system performance on equity, sustainability, and security and readiness of the enabling environment on policies and regulatory framework, infrastructure, innovation, education and human capital, and finance and investment.

81. Recent energy supply disruptions have heightened concerns on energy security leading many nations to prioritize immediate energy needs over long-term sustainability goals. The WEF report highlights that several countries have experienced a reversal in energy transition momentum shifting focus away from clean energy efforts.

82. **Figure 9** below illustrates the year-over-year change in the ETI score, highlighting the slowdown in energy transition reported by the WEF. The graph shows a sharp decline in the ETI growth in 2023 and 2024. Notably, the three-year compound annual growth rate (CAGR) of ETI scores fell from 0.83% in 2021 to 0.22% in 2024, a significant reduction.

Figure 9. Energy Transition Index momentum, three-year CAGR percentage, 2015–2024



Source: World Economic Forum, “Fostering Effective Energy Transition: Insight Report,” June, 2024, available at https://www3.weforum.org/docs/WEF_Fostering_Effective_Energy_Transition_2024.pdf, p. 16.

83. The WEF report highlights that ETI score improvements have slowed in Germany, Japan, and the United States since 2023. For example, the 2024 report noted “the US has seen robust

growth in ETI scores over the past three years, with the Inflation Reduction Act (IRA) playing a key role in providing the economic environment for renewable energy and EV adoption. However, the pace of the transition has decreased in the past year due to a backlog in connecting clean energy projects to the grid, especially with large projects taking longer to connect.”¹⁵⁵

D. Crack Spreads

84. A crack spread measures the difference between the price of crude oil and the prices of refined petroleum products such as gasoline and diesel. It is a key indicator of refining profitability. Two broad economic forces have recently influenced crack spread trends—and, by extension, CITGO’s profitability. The first is supply-side dynamics, particularly global refining capacity. As discussed in **Section V.B.1**, capacity will remain constrained in the coming years: existing facilities are being shut down or repurposed, and few new projects are coming online. The second is demand. Although global oil demand is growing more slowly than in previous years, it continues to rise and is projected to do so in the coming years, as detailed in **Section V.B.2**. A supply-constrained environment combined with rising demand places upward pressure on crack spreads, benefiting refiners like CITGO—assuming other macroeconomic conditions remain stable.

85. The second major economic factor influencing crack spreads is the broader macroeconomic environment shaped by the administration’s tariffs and a global economic slowdown that has increased macroeconomic uncertainty. Even if an official recession does not materialize, heightened volatility in global supply chains is already being felt across the oil industry. These macroeconomic conditions tend to compress crack spreads, reducing the profit margin of refiners like CITGO. Crack spreads have been declining since the start of 2025, and this downward trend is expected to continue through the remainder of the year. Of the two factors previously discussed, macroeconomic conditions are currently having a larger impact on the crack spreads than the industry-specific supply and demand factors.

¹⁵⁵ Id., p. 14.

86. Global refining capacity remains constrained due to delays in new refinery construction in Africa and Latin America (cited above), and ongoing disruptions in Russia. While most refining capacity additions are concentrated in Asia and the Middle East, the pace of expansion is expected to slow down beyond 2024. US refineries maintain a competitive advantage due to their access to low-cost crude, as well as their higher system complexity and operational efficiency.

87. No new capacity expansions have been announced in the United States. Meanwhile, the closure of the 270,000 barrel per day LyondellBasell Houston refinery in January 2025,¹⁵⁶ and the conversion of the 115,000 barrel per day Phillips 66 Rodeo refinery in April 2024,¹⁵⁷ are expected to tighten domestic supply and increase crack spreads in the coming years.

88. As recently as April and May 2025, major independent US refiners such as Phillips 66, Valero, and Marathon Petroleum have publicly indicated a bullish outlook for the sector, driven by the expectation of stable and sustained cracks spreads for light refined products in the coming years.

“We now have an additional 40,000 barrels per day of heavy light crude switching capability. Depending on market conditions, we will run additional Permian barrels, displacing imported heavy crudes. We expect this flexibility in a rapidly changing price environment will enhance long-term margins at this strategic refinery.”

- Phillips 66 (PSX) Q1 2025 Earnings Call¹⁵⁸

¹⁵⁶ S&P; Erwin Seba, “Lyondell to begin closure of Houston refinery this weekend, sources say,” Reuters, January 22, 2025, accessed March 27, 2025, available at <https://www.reuters.com/business/energy/lyondell-begin-closure-houston-refinery-this-weekend-sources-say-2025-01-22/>.

¹⁵⁷ Al Ortiz, “Rodeo milestone marks high point in four-year journey,” Phillips 66, Press Release, April 15, 2024, accessed April 28, 2025, available at <https://www.phillips66.com/newsroom/rodeo-renewed-milestone/>; Argus Media, “Phillips 66 completes Rodeo renewables conversion,” June 26, 2024, accessed July 1, 2025, available at <https://www.argusmedia.com/en/news-and-insights/latest-market-news/2581689-phillips-66-completes-rodeo-renewables-conversion>.

¹⁵⁸ S&P Global, Phillips 66 (PSX) Q1 2025 Earnings Call Transcript, April 25, 2025, available at <https://www.spglobal.com/market-intelligence/en>.

“Refining margins improved through the quarter with US light product demand slightly higher than last year and product inventory is below the same period last year.”

- Valero Energy Corporation (VLO) Q1 2025 Earnings Call¹⁵⁹

“We believe underlying fundamentals support stronger margins; especially as announced refinery closures offset recent capacity additions.”

- Marathon Petroleum Q1 2025 Earnings Call¹⁶⁰

89. [REDACTED]

[REDACTED]

¹⁵⁹ S&P Global, Valero Energy Q1 2025 Earnings Call Transcripts, April 24, 2025, available at <https://www.spglobal.com/market-intelligence/en>.

¹⁶⁰ S&P Global, Marathon Petroleum (MPC) Q1 2025 Earnings Call Transcript, May 6, 2025, available at <https://www.spglobal.com/market-intelligence/en>.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

90. [REDACTED]

[REDACTED]

In 2023 and 2024, CITGO's three refineries maintained gasoline and distillate yields above 75% in their product slates.¹⁶³ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁶³ Evercore, Confidential Information Memorandum, January 27, 2025 ("2025.1.27 Project Horizon Management Presentation (Jan 2025) FINAL.pdf"), pp. 42, 54, 66.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

E. Light-Heavy Crude Differentials

91. The price difference between light sweet crude and heavy sour crudes is known as the “Light-Heavy Spread.” Since light oil typically commands a higher price than heavy oil, the Light-Heavy Spread is positive. When this spread widens, refiners have an incentive to increase heavy crude processing, but only within the physical limits of the refining equipment as described by the measure of complexity of a refinery’s operations. Refineries with higher complexity are more flexible in adjusting their input slate and adapting to fluctuations of the Light-Heavy Spread.

92. A wider light-heavy crude differential benefits CITGO’s complex refineries by allowing them to use lower cost feedstocks. CITGO’s refining system is strategically positioned to benefit from a widening light-heavy crude differential as its three refineries continue to secure access to

competitively priced Canadian heavy crudes as well as advantageously priced US domestic light crudes.

93. All three CITGO refineries were designed with high complexity to process large volumes of heavy sour crudes into high-value products. Since Venezuelan crude supplies declined due to the 2019 sanctions, CITGO successfully replaced heavy volumes with alternative streams from Canada and Latin America maintaining balanced feedstock slates of light and heavy crudes to optimize utilization and maximize premium product yields. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Additionally, the two Gulf Coast refineries will continue to benefit from their proximity to takeaway pipelines from major Texas oil producing basins, while the Lemont refinery remains supplied by Western Canada crude.

¹⁶⁴ Evercore, CITGO Financial Projections, February 2024 (“CITGO Financial Projections (Round 2)_February 2024_Highly Confidential-Clean Team.xlsx”); Evercore, Revised CITGO Financial Projections, January 26, 2025 (“Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx”).

[REDACTED]

[REDACTED]

94. In 2020, CITGO shut down a delayed coker at its Lake Charles refinery to maximize domestic light crude throughput and capitalize on abundant low-cost local crudes.¹⁶⁵ In the first quarter of 2024, CITGO restarted the coker at the Lake Charles refinery, increasing the refinery's heavy crude processing capacity.¹⁶⁶ This enhanced capability allows the Lake Charles refinery to further benefit from the expected widening of the light-heavy spread in the medium term. The resulting feedstock cost savings contributes to higher refining margins and stronger free cash flow.

¹⁶⁵ Oil & Gas Journal, "Citgo restarts vacuum distillation unit, delayed coker at Lake Charles refinery," May 9, 2024, accessed April 28, 2025, available at <https://www.ogj.com/refining-processing/refining/operations/article/55038653/citgo-restarts-vacuum-distillation-unit-delayed-coker-at-lake-charles-refinery>.

¹⁶⁶ CITGO, "CITGO Reports First Quarter 2024 Results," May 9, 2024, accessed August 27, 2024, available at <https://www.CITGO.com/newsroom/press-releases/2024/CITGO-reports-first-quarter-2024-results> ("The Lake Charles Refinery successfully restarted a vacuum distillation unit and a delayed coker, both of which had been offline since the summer of 2020, further enhancing the refinery's heavy crude processing capabilities.").

VI. CPC and PDVH Income Forecasts

95. CPC owns nearly all PDVH assets and generates almost all income claimed by PDVH. I first present the historical financials for CPC, followed by those for PDVH. **Appendix D** includes a table comparing revenue, net income, and EBITDA for CPC and PDVH for 2020–2024.

96. Income forecasts were only prepared for CPC, which I describe and analyze in detail. To project CPC’s future income, I use the company’s volume forecast and price estimates derived from four third-party analysts.

97. Under the current corporate structure (as of December 2023), PDVH owns four small subsidiaries—CITGO Aruba Holding, LLC; LDC Supply International, LLC; PDV Chalmette, LLC; and PDV USA, Inc.—in addition to CITGO Holding.¹⁶⁷ In turn, CITGO Holding owns only CPC, which controls all the other subsidiaries.¹⁶⁸ The non-CPC subsidiaries of PDVH generated no revenue in 2024. The ownership structure results in additional costs for PDVH, such as SG&A expenses and income tax, which reduce PDVH’s EBITDA relative to CPC’s.

A. Historical Financial Performance

1. CPC Historical Financial Performance

98. I have reviewed CPC annual and quarterly reports from 2017–2024, and earnings conference call presentations covering the same period. The company’s financials, including EBITDA, adjusted EBITDA, and free cash flow are tabulated in **Table 2** below for the years 2017–2024.

¹⁶⁷ CITGO Organization Chart, December 5, 2023 (“2023 12 05 CITGO Org Chart Def_ REVISED.pdf”).

¹⁶⁸ *Ibid*; *see also* Figure 1.

Table 2. Financials for CPC, 2017–2024

(\$ in millions USD)	2017	2018	2019	2020	2021	2022	2023	2024
<i>Gross Margin: Refinery</i>								
Lake Charles	\$ 1,320	\$ 1,562	\$ 1,201	\$ 197	\$ 1,179	\$ 3,659	\$ 2,785	\$ 1,654
Corpus Christi	732	567	491	322	478	1,570	1,076	629
Lemont	713	1,350	1,006	441	764	1,702	1,455	960
Total Refinery	2,765	3,479	2,698	960	2,421	6,931	5,316	3,243
<i>EBITDA: Refinery</i>								
Lake Charles	553	719	418	(495)	293	2,447	1,753	633
Corpus Christi	345	157	94	(62)	(17)	980	484	49
Lemont	313	926	626	62	319	1,163	935	389
Total Refinery	1,211	1,802	1,138	(495)	595	4,590	3,172	1,071
<i>EBITDA: Non-Refining Business</i>								
Terminals & Pipelines						140	119	169
Lubricants	9	13	22	17	30	26	37	25
Marketing	159	162	104	150	140	144	156	146
Product Supply	58	106	(16)	(24)	(12)	(143)	80	(36)
Total Non-Refining Business	226	281	110	143	158	167	392	304
Corporate G&A Expense	(174)	(281)	(143)	24	(130)	(357)	(271)	(220)
EBITDA	1,263	1,802	1,105	(328)	623	4,400	3,293	1,155
Adjusted EBITDA	1,294	1,924	1,176	(432)	557	4,410	3,246	1,102
<i>Capital Investments</i>								
Regulatory/Environmental	44	67	60	39	71	97	78	107
Maintenance	163	144	170	97	98	99	114	195
Safety / Risk Mitigation	14	11	13	16	29	33	27	26
Strategic	16	15	37	31	2	7	91	115
Total Capital Investments	237	237	280	183	200	236	310	443
Turnaround and Catalyst				331	184	373	394	502
Pre-Tax Free Cash Flow				(946)	173	3,801	2,542	157

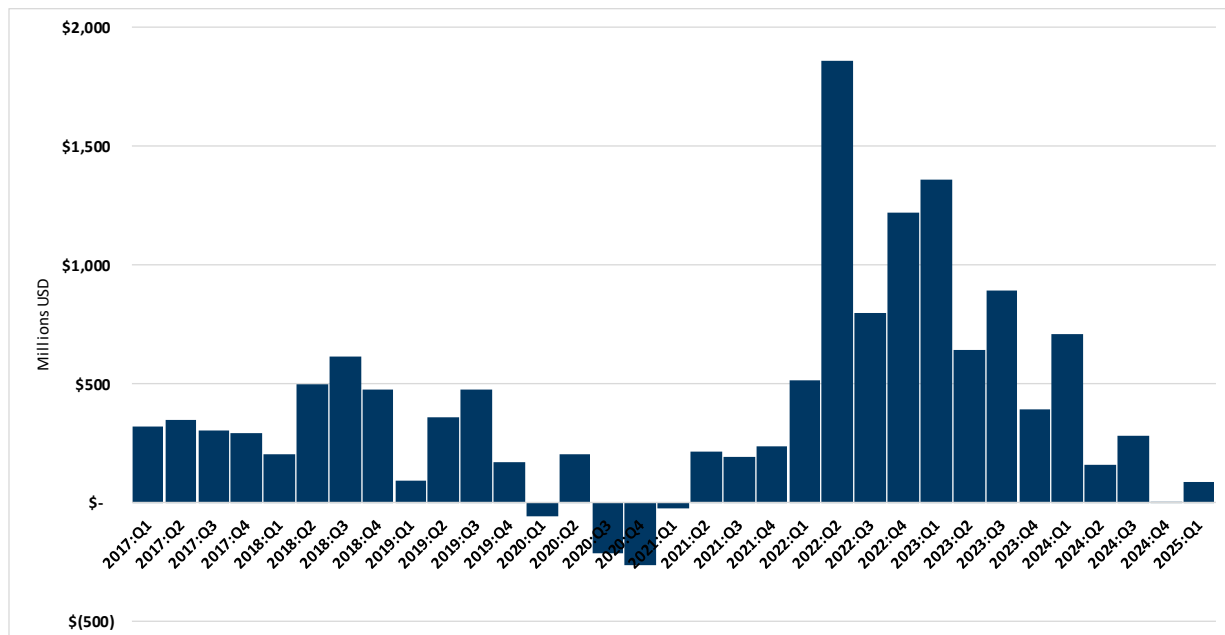
Sources: [2017] CITGO Petroleum Corporation Annual Report 2018 for the fiscal year ended December 31, 2018, March 28, 2019, p. 49; CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2018, March 28, 2019, pp. 4, 17-20; [2018] CITGO Petroleum Corporation Annual Report 2018 for the fiscal year ended December 31, 2018, March 28, 2019, p. 49; CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2018, March 28, 2019, pp. 4, 17-20; [2019] CITGO Petroleum Corporation Annual Report 2019 for the fiscal year ended December 31, 2019, March 25, 2020, p. 52; CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2019, March 26, 2020, pp. 4, 17-20; [2020] CITGO Petroleum Corporation Annual Report 2020 for the fiscal year ended December 31, 2020, March 24, 2021, p. 56; CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2020, March 25, 2021, pp. 5, 18-21; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 13; [2021] CITGO Petroleum Corporation Annual Report 2021 for the fiscal year ended December 31, 2021, March 23, 2022, p. 57-58; CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2021, March 24, 2022, pp. 3, 16-19; [2022] CITGO Petroleum Corporation Annual Report 2022 for the fiscal year ended December 31, 2022, March 8, 2023, p. 55-56; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, pp. 5, 10, 13, 15-18; [2023] CITGO Petroleum Corporation Annual Report 2023 for the fiscal year ended December 31, 2023, March 6, 2024, p. 59-60; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, pp. 5, 10, 13, 15-18; [2024] CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, pp. 62-63; CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, pp. 4, 5, 10, 14-17.

Notes: (1) EBITDA for Terminals & Pipelines was not separately reported in 2017–2021. (2) Total capital expenditures for 2017–2019 do not include change in accruals. (3) Turnaround and Catalyst Expenses were not reported for 2017–2019 and, therefore, free cash flow does not account for this value. (4) Adjustments reported in the CPC financials included social development donations expense, LIFO inventory permanent dip impact, litigation judgment – telemarketing, gain on sales of assets, and property impairment and loss on retirement of assets in 2017; social development donations expense, LIFO inventory permanent dip impact,

litigation judgment – MTBE, litigation judgment – Athos, gain on sales of assets, and property impairment and loss on retirement of assets in 2018; Gerd inventory impairment, PDVIC insurance recovery impairment, litigation judgment – 303 hydraulic fluid, property impairments and loss on retirement of assets, social development donations expense, LIFO inventory permanent dip impact, litigation cost recovery – Athos, and loss of early extinguishment of debt in 2019; insurance litigation recovery – Athos, litigation recovery – credit card interchange fees, LIFO inventory permanent dip impact, Hurricane Laura expenses, net of insurance recoveries, charitable contributions, and loss on early extinguishment of debt in 2020; LIFO inventory permanent dip impact, Hurricane Laura costs, net of insurance claims, Winter Storm Uri costs, net of insurance claims, charitable contributions, and loss on early extinguishment of debt in 2021; NISCO impairment, loss of early extinguishment of debt, and LIFO inventory permanent dip impact in 2022; LIFO inventory permanent dip, legal settlement, and Vicksburg terminal sale in 2023; and NISCO dissolution settlement, LIFO inventory permanent dip, legal settlements, and Hurricane Laura insurance recoveries in 2024.

99. **Figure 13** below is a graph of CPC EBITDA for the quarters from 2017:Q1–2025:Q1.

Figure 13. CPC EBITDA by Quarter, 2017:Q1–2025:Q1



(in millions USD)	2017:Q1	2017:Q2	2017:Q3	2017:Q4	2018:Q1	2018:Q2	2018:Q3	2018:Q4	2019:Q1	2019:Q2	2019:Q3	2019:Q4
EBITDA	\$ 319	\$ 349	\$ 302	\$ 293	\$ 204	\$ 501	\$ 618	\$ 479	\$ 93	\$ 359	\$ 479	\$ 174
	2020:Q1	2020:Q2	2020:Q3	2020:Q4	2021:Q1	2021:Q2	2021:Q3	2021:Q4	2022:Q1	2022:Q2	2022:Q3	2022:Q4
EBITDA	\$ (55)	\$ 203	\$ (212)	\$ (264)	\$ (21)	\$ 214	\$ 194	\$ 236	\$ 518	\$ 1,861	\$ 798	\$ 1,223
	2023:Q1	2023:Q2	2023:Q3	2023:Q4	2024:Q1	2024:Q2	2024:Q3	2024:Q4	2025:Q1			
EBITDA	\$ 1,360	\$ 642	\$ 895	\$ 396	\$ 709	\$ 162	\$ 281	\$ 2	\$ 88			

Sources: [2017:Q1] CITGO Petroleum Corporation Earnings Conference Call for 1st Quarter 2018, May 10, 2018, p. 4; [2017:Q2] CITGO Petroleum Corporation Earnings Conference Call for 2nd Quarter 2018, August 14, 2018, p. 4; [2017:Q3] CITGO Petroleum Corporation Earnings Conference Call for 3rd Quarter 2018, November 15, 2018, p. 4; [2017:Q4] CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2018, March 28, 2019, p. 4; [2018:Q1] CITGO Petroleum Corporation Earnings Conference Call for 1st Quarter 2019, May 10, 2019, p. 4; [2018:Q2] CITGO Petroleum Corporation Earnings Conference Call for 2nd Quarter 2019, August 15, 2019, p. 4; [2018:Q3] CITGO Petroleum Corporation Earnings Conference Call for 3rd Quarter 2019, November 14, 2019, p. 4; [2018:Q4] CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2019, March 26, 2020, p. 4; [2020:Q1] CITGO Petroleum Corporation Earnings Conference Call for 1st Quarter 2020, May 10, 2020, p. 4; [2020:Q2] CITGO Petroleum Corporation Earnings Conference Call for 2nd Quarter 2020, August 14, 2020, p. 4; [2020:Q3] CITGO Petroleum Corporation Earnings Conference Call for 3rd Quarter 2020, November 15, 2020, p. 4; [2020:Q4] CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2020, March 28, 2021, p. 4; [2021:Q1] CITGO Petroleum Corporation Earnings Conference Call for 1st Quarter 2021, May 10, 2021, p. 4; [2021:Q2] CITGO Petroleum Corporation Earnings Conference Call for 2nd Quarter 2021, August 14, 2021, p. 4; [2021:Q3] CITGO Petroleum Corporation Earnings Conference Call for 3rd Quarter 2021, November 15, 2021, p. 4; [2021:Q4] CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2021, March 28, 2022, p. 4; [2022:Q1] CITGO Petroleum Corporation Earnings Conference Call for 1st Quarter 2022, May 10, 2022, p. 4; [2022:Q2] CITGO Petroleum Corporation Earnings Conference Call for 2nd Quarter 2022, August 14, 2022, p. 4; [2022:Q3] CITGO Petroleum Corporation Earnings Conference Call for 3rd Quarter 2022, November 15, 2022, p. 4; [2022:Q4] CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2022, March 28, 2023, p. 4; [2023:Q1] CITGO Petroleum Corporation Earnings Conference Call for 1st Quarter 2023, May 10, 2023, p. 4; [2023:Q2] CITGO Petroleum Corporation Earnings Conference Call for 2nd Quarter 2023, August 14, 2023, p. 4; [2023:Q3] CITGO Petroleum Corporation Earnings Conference Call for 3rd Quarter 2023, November 15, 2023, p. 4; [2023:Q4] CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2023, March 28, 2024, p. 4; [2024:Q1] CITGO Petroleum Corporation Earnings Conference Call for 1st Quarter 2024, May 10, 2024, p. 4; [2024:Q2] CITGO Petroleum Corporation Earnings Conference Call for 2nd Quarter 2024, August 14, 2024, p. 4; [2024:Q3] CITGO Petroleum Corporation Earnings Conference Call for 3rd Quarter 2024, November 15, 2024, p. 4; [2024:Q4] CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2024, March 28, 2025, p. 4; [2025:Q1] CITGO Petroleum Corporation Earnings Conference Call for 1st Quarter 2025, May 10, 2025, p. 4.

Corporation Earnings Conference Call for 1st Quarter 2020, May 14, 2020, p. 4; [2020:Q2] CITGO Petroleum Corporation Earnings Conference Call for 2nd Quarter 2020, August 13, 2020, p. 5; [2020:Q3] CITGO Petroleum Corporation Earnings Conference Call for 3rd Quarter 2020, November 12, 2020, p. 5; [2020:Q4] CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2020, March 25, 2021, p. 5; [2021:Q1] CITGO Petroleum Corporation Earnings Conference Call for 1st Quarter 2021, May 13, 2021, p. 3; [2021:Q2] CITGO Petroleum Corporation Earnings Conference Call for 2nd Quarter 2021, August 12, 2021, p. 3; [2021:Q3] CITGO Petroleum Corporation Earnings Conference Call for 3rd Quarter 2021, November 11, 2021, p. 3; [2021:Q4] CITGO Petroleum Corporation Earnings Conference Call for 4th Quarter 2021, March 24, 2022, p. 3; [2022:Q1] CITGO Petroleum Earnings Conference Call for 1st Quarter 2023, May 11, 2023, p. 5; [2022:Q2] CITGO Petroleum Earnings Conference Call for 2nd Quarter 2023, August 10, 2023, p. 5; [2022:Q3] CITGO Petroleum Earnings Conference Call for 3rd Quarter 2023, November 9, 2023, p. 5; [2022:Q4] CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 5; [2023:Q1] CITGO Petroleum Earnings Conference Call for 1st Quarter 2023, May 11, 2023, p. 5; [2023:Q2] CITGO Petroleum Earnings Conference Call for 2nd Quarter 2023, August 10, 2023, p. 5; [2023:Q3] CITGO Petroleum Earnings Conference Call for 3rd Quarter 2023, November 9, 2023, p. 5; [2023:Q4] CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 5; [2024:Q1] CITGO Petroleum Earnings Conference Call for 1st Quarter 2024, May 9, 2024, p. 5; [2024:Q2] CITGO Petroleum Earnings Conference Call for 2nd Quarter 2024, August 9, 2024, p. 5; [2024:Q3] CITGO Petroleum Earnings Conference Call for 3rd Quarter 2024, November 14, 2024, p. 5; [2024:Q4] CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 5; [2025:Q1] CITGO Petroleum Earnings Conference Call for 1st Quarter 2025, May 8, 2025, p. 5.

2. PDVH Historical Financial Performance

100. I have reviewed PDVH's annual and quarterly reports for the period 2020:Q1–2025:Q1, which are the only periods for which PDVH financials were available. PDVH's financials, including total revenue, net income, EBITDA, and free cash flow are tabulated in **Table 3** below for the years 2020–2024.

Table 3. Financials for PDVH, 2020–2024

(\$ in millions USD)	2020	2021	2022	2023	2024
Net Sales	\$14,731	\$27,421	\$45,399	\$37,523	\$34,926
Equity in earnings of affiliates and other revenue	31	32	34	30	44
Total Revenues	14,761	27,453	45,433	37,553	34,970
Cost of sales and operating expenses	14,976	26,588	40,681	33,942	
Cost of sales					31,023
Operating expenses					2,489
SG&A	307	271	341	434	425
Depreciation and amortization	617	596	593	652	707
Interest expense	396	421	404	105	43
Other (income) expense	(590)	(50)	(10)	(120)	(96)
Total Costs	15,706	27,826	42,009	35,012	34,591
Income before income taxes	(945)	(373)	3,424	2,541	378
Income tax expense	(463)	(88)	735	552	90
Net income (loss)	(482)	(285)	2,688	1,989	288
Interest expense, net	396	421	404	105	43
Income tax expense	(463)	(88)	735	552	90
Depreciation and amortization	617	596	593	652	707
EBITDA	69	645	4,421	3,298	1,129
CPC Adjustments	(104)	(66)	27	(47)	(53)
Adjusted EBITDA	(35)	579	4,448	3,251	1,076
CPC Capital Expenditures	183	200	236	310	443
CPC Turnaround and Catalyst	331	184	373	394	502
Pre-Tax Free Cash Flow	(549)	195	3,839	2,547	131

Sources: [2020] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2021 and 2020, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2020, March 25, 2021, p. 5; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 13; CITGO Petroleum Corporation Annual Report 2020 for the fiscal year ended December 31, 2020, March 24, 2021, p. 56; [2021] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2021 and 2020, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2021, March 24, 2022, p. 3; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 13; CITGO Petroleum Corporation Annual Report 2020 for the fiscal year ended December 31, 2020, March 24, 2021, p. 57-58; [2022] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2022 and 2021, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2022, March 9, 2023, p. 5; CITGO Petroleum Corporation Annual Report 2022 for the fiscal year ended December 31, 2022, March 8, 2023, p. 55-56; [2023] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2023 and 2022, April 18, 2024, p. 2; CITGO Petroleum Earnings

Conference Call for 4th Quarter 2023, March 7, 2024, pp. 5, 13; CITGO Petroleum Corporation Annual Report 2023 for the fiscal year ended December 31, 2023, March 6, 2024, p. 59-60; [2024] CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 5; CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, pp. 62-63; PDV Holding, Inc. Annual Report for the Fiscal Year Ended December 31, 2024, March 6, 2025, p. F-4.

Notes: EBITDA adjustments, Capital Expenditures and Turnaround and Catalyst Expenditures are not reported for PDVH. Therefore, CITGO Holding values are used. For 2023 EBITDA adjustments, CITGO Petroleum adjustments are used. Capital Expenditures and Turnaround and Catalyst Expenditures are not reported for CITGO Holding for 2020–2021 and 2023. CITGO Petroleum values are used in this case. EBITDA is calculated using the following equation: Net Income + Interest Expense + Income Tax Expense + Depreciation and amortization. Adjusted EBITDA is calculated using the adjustments made to CITGO Holding EBITDA, according to the corporate structure.

101. PDVH’s revenue is entirely derived from CPC. PDVH’s financials differ from CPC’s due to additional costs incurred by PDVH. Based on the reported financials of both entities, I compare PDVH’s EBITDA to CPC’s EBITDA for 2024:Q1–2025:Q1, the period following the 2023 corporate reorganization in which several subsidiaries were transferred to CPC’s ownership.¹⁶⁹ In 2024:Q1–2025:Q1, PDVH’s EBITDA was 3.39% smaller than CPC’s (see **Table 4** below).

Table 4. PDVH and CPC EBITDA, 2024:Q1–2025:Q1

(\$ in millions USD)	CITGO Petroleum Corporation						PDV Holding, Inc.						Ratio
	2024:Q1	2024:Q2	2024:Q3	2024:Q4	2024	2025:Q1	2024:Q1	2024:Q2	2024:Q3	2024:Q4	2024	2025:Q1	
Net Sales	\$ 8,924	\$ 8,637	\$ 8,899	\$ 8,466	\$34,926	\$ 8,359	\$ 8,924	\$ 8,637	\$ 8,899	\$ 8,466	\$34,926	\$ 8,359	
Equity in earnings of affiliates and other revenue	8	20	8	8	44	10	8	20	8	7	44	10	
Total Revenues	8,932	8,657	8,908	8,474	34,970	8,369	8,932	8,657	8,908	8,474	34,970	8,369	
Cost of sales and operating expenses	8,179	8,406	8,522	8,405	33,512	8,192	8,179	8,406	8,522	8,405	33,512	8,192	
SG&A	87	102	110	103	402	98	89	108	117	111	425	113	
Depreciation and amortization	173	175	180	178	707	178	173	175	180	179	707	178	
Interest expense, net	11	10	15	12	47	18	10	9	14	11	43	17	
Other (income) expense	(44)	(12)	(7)	(36)	(99)	(8)	(43)	(12)	(6)	(35)	(96)	(7)	
Total Costs	8,407	8,681	8,820	8,661	34,569	8,477	8,408	8,686	8,827	8,671	34,591	8,492	
Income before income taxes	525	(24)	87	(187)	401	(108)	523	(29)	81	(197)	378	(123)	
Income tax expense	115	1	21	(42)	96	(25)	114	5	17	(46)	90	(29)	
Net income	410	(25)	66	(145)	305	(82)	409	(34)	64	(151)	288	(94)	
Interest expense, net	11	10	15	12	47	18	10	9	14	11	43	17	
Income tax expense	115	1	21	(42)	96	(25)	114	5	17	(46)	90	(29)	
Depreciation and amortization	173	175	180	178	707	178	173	175	180	179	707	178	
EBITDA	709	161	282	3	1,155	88	706	155	275	(8)	1,129	72	-3.39%

Sources: [2024:Q1] CITGO Petroleum Corporation Report for the Quarterly Period Ended March 31, 2024, May 8, 2024, p. 7; [2024:Q2] CITGO Petroleum Corporation Report for the Quarterly Period Ended June 30, 2024, August 7, 2024, p. 7; [2024:Q3] CITGO Petroleum Corporation Report for the Quarterly Period Ended September 30, 2024, November 13, 2024, p. 7; [2024:Q4] CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, p. 55; [2025:Q1] CITGO Petroleum Corporation Report for the Quarterly Period Ended March 31, 2025, May 7, 2025, p. 7; [2024:Q1] PDV Holding, Inc. Report for the Quarterly Period Ended March 31, 2024, May 22, 2024, p. 7; [2024:Q2] PDV Holding, Inc. Report for the Quarterly Period Ended June 30, 2024, August 7, 2024, p. 7; [2024:Q3] PDV Holding, Inc. Report for the Quarterly Period Ended September 30, 2024, November 13, 2024, p. 7; [2024:Q4] PDV Holding, Inc. Annual Report for the Fiscal Year Ended December

¹⁶⁹ Compare CITGO Organization Chart, February 28, 2023 (“2023 02 28 CITGO Org Chart Def_REVISED.pdf”) and CITGO Organization Chart, December 5, 2023 (“2023 12 05 CITGO Org Chart Def_REVISED.pdf”).

31, 2024, March 6, 2025, p. F-4; [2025:Q1] PDV Holding, Inc. Report for the Quarterly Period Ended March 31, 2025, May 7, 2025, p. 7.

102. This logic is reflected in Evercore’s financial modeling of the CPC forecasts. CPC provided Evercore with its Medium-Term Plan (“MTP”) for 2025–2030, which included projected corporate expenses for each year in the forecast period.¹⁷⁰ In its financial modeling, Evercore separated those corporate expense forecasts into two categories: “Corporate G&A Expense” and “PDVH & Other Subsidiaries Expenses.”¹⁷¹ The amounts attributed to “PDVH & Other Subsidiaries Expenses” were \$27.9 million per year from 2025 to 2030. This explicitly acknowledges that the incremental costs associated with PDVH (above and beyond CPC’s costs) would be \$27.9 million annually. Accordingly, this dollar amount represents the most reliable estimate of incremental costs going forward and serves as the basis for my financial forecasting model.

B. Forecasted Financial Performance using CITGO Price Estimates

103. [REDACTED]

104. [REDACTED]

¹⁷⁰ CITGO, Medium Term Plan 2025-2030, January 20, 2025 (“2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf”).

¹⁷¹ Evercore, CITGO Financial Projections, January 26, 2025 (“Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx”).

[REDACTED]

105. The capital expenditures and turnaround and catalyst expenditures for CPC and PDVH are identical. Thus, I calculate PDVH's free cash flow from PDVH's EBITDA minus capital expenditures and minus turnaround and catalyst expenditures. See **Table 5** below.

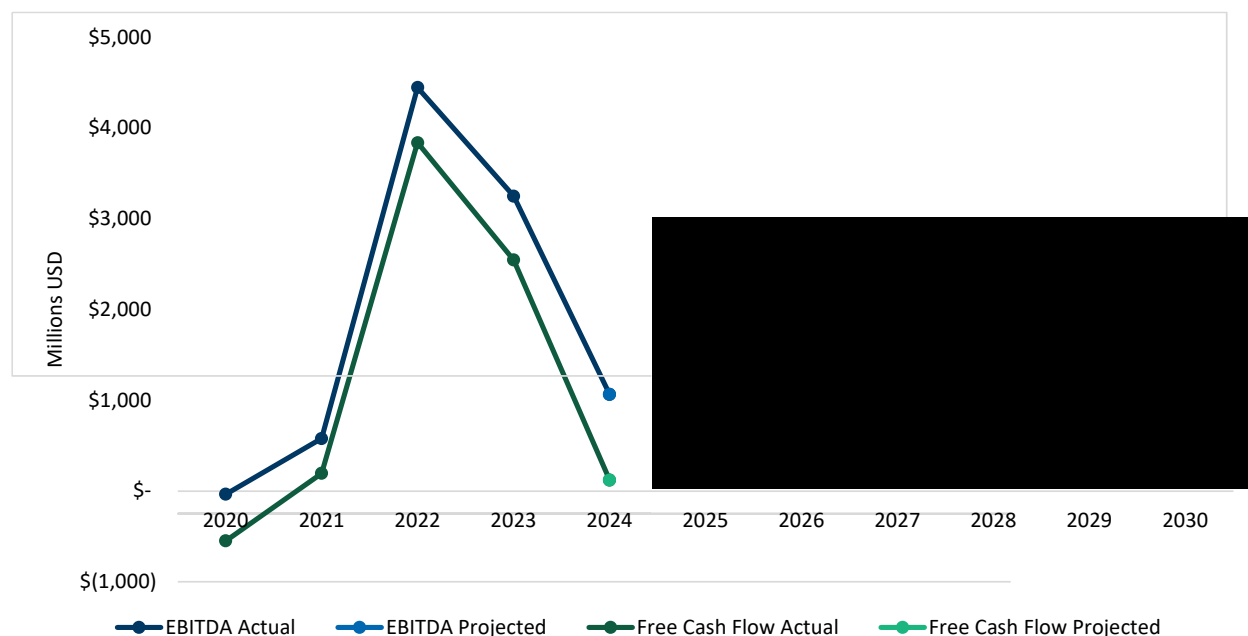
[REDACTED]

[REDACTED]

[REDACTED]

106. **Figure 14** below illustrates the PDVH adjusted EBITDA and the post-tax free cash flow, including the actual values from 2020–2024 and the projected values from 2025–2030.

Figure 14. PDVH EBITDA and Free Cash Flow, Actual and Projected (CITGO Forecast), 2020–2030



Sources: [2020] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2021 and 2020, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2020, March 25, 2021, p. 5; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 13; CITGO Petroleum Corporation Annual Report 2020 for the fiscal year ended December 31, 2020, March 24, 2021, p. 56; [2021] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2021 and 2020, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2021, March 24, 2022, p. 3; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 13; CITGO Petroleum Corporation Annual Report 2020 for the fiscal year ended December 31, 2020, March 24, 2021, p. 57-58; [2022] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2022 and 2021, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2022, March 9, 2023, p. 5; CITGO Petroleum Corporation Annual Report 2022 for the fiscal year ended December 31, 2022, March 8, 2023, p. 55-56; [2023] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2023 and 2022, April 18, 2024, p. 2; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, pp. 5, 13; CITGO Petroleum Corporation Annual Report 2023 for the fiscal year ended December 31, 2023, March 6, 2024, p. 59-60; [2024] CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 5; CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, pp. 62-63; PDV Holding, Inc. Annual Report for the Fiscal Year Ended December 31, 2024, March 6, 2025, p. F-4; [2025-2030] Evercore, Revised CITGO Financial Projections, January 26, 2025 (“Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx”); CITGO, Medium Term Plan 2025-2030, January 20, 2025 (“2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf”), p. 71.

C. Forecasted Financial Performance using Third-Party Price Forecasts

107. CITGO regularly develops volume and price forecasts for all its products—both inputs and outputs—across its three refineries. Operating in competitive markets, the company is both a price

taker and a quantity taker: it is able to sell all of its output at prices over which it has no influence.¹⁷⁵ CITGO's volume forecasts, which cover both input purchases and output sales, are grounded in its assessment of market conditions as well as technical and operational factors and represent the most reliable source for projecting volumes. In contrast, its price forecasts are not necessarily the most reliable indicators. Accordingly, I rely instead on independent price forecasts derived from third-party analyst reports. While CITGO and I reference similar external sources, I develop my own independent price forecasts (referred to as the "composite forecast").

108. Using third-party analyst reports enables me to validate CITGO's price projections and to correct and make timely adjustments when necessary. The most recent CITGO price forecasts available to me are from the MTP 2025–2030 dated January 2025. Although CITGO has since updated its estimate of 2025 EBITDA, the update provided by the company presents only total EBITDA for the entire company and does not contain product-level price updates. Relying on third-party forecasts, ensures that my model reflects the most current and accurate price projections available.

109. The third-party price forecasts I rely on include publications from S&P Global Platts, RBN Energy, Turner Mason, and Wood Mackenzie. I obtained and reviewed datasets from each of these source, with the relevant report dates summarized in **Table 6** below.

110. I purchased access to the long-term price forecasts from S&P Global Platts included in its Crude and Refined Products Package.¹⁷⁶ These quarterly-updated forecasts include annual historical and projected prices. The datasets I use include the North American long-term outlook for crude prices for 2025:Q1 (dated March 11, 2025); the North American long-term outlook for refined product prices for 2025:Q1 (dated March 11, 2025); the North American long-term outlook

¹⁷⁵ In economics, supply and demand jointly determine price and quantity. In competitive markets, prices are determined by the market and an individual competitor's supply decisions do not have a significant effect on the competitive price in the market.

¹⁷⁶ S&P Global Platts, Crude and Refined Products Package, North America Crude Oil Markets Price Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America Refining and Marketing Price and Margin Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America NGL Price Long-Term Outlook for 2025:Q1, March 21, 2025; S&P Global Platts, Crude and Refined Products Package, Base Oil Price Outlook for 2025:Q1, April 9, 2025.

for natural gas liquids (NGLs) for 2025:Q1 (dated March 21, 2025); and the global long-term outlook for base oil prices for 2025:Q1 (dated April 9, 2025).¹⁷⁷

111. I also purchased the long-term outlook price forecasts developed by RBN Energy through its Refined Fuels Analytics (RFA) research department. These forecasts are included in RBN's report titled "Future of Fuels: RFA Outlook for Crude Oil, Refined Products, Biofuels and EVs," dated January 31, 2025.¹⁷⁸ The price forecasts are updated multiple times per year and contain annual historical and forecasted prices. The dataset I rely upon includes the Appendix 8 Excel file titled "Appendix 8 - Price Forecasts."¹⁷⁹

112. Additionally, I acquired Turner, Mason & Company's long-term price forecasts, detailed in its analyst report, "2025 Crude and Refined Products Outlook."¹⁸⁰ These forecasts, updated multiple times per year, provide annual historical and forecasted prices. The dataset that I rely on is contained in Appendix 3, an Excel file titled "Appendix 3: Price Outlook."¹⁸¹

113. Finally, I reviewed the long-term outlook price forecasts developed by Wood Mackenzie which are updated multiple times a year and include annual historical and forecasted prices.¹⁸² The datasets I rely on include the North American Crude Outlook Excel file dated March 2025, the USGC Refined Products Outlook Excel file dated May 2025, and the USMC Refined Products Outlook Excel file dated May 2025.¹⁸³

¹⁷⁷ Ibid.

¹⁷⁸ RBN Energy, Future of Fuels: RFA Outlook for Crude Oil, Refined Products, Biofuels and EVs, Volume 5, January 31, 2025, Appendix 8 – Price Forecasts.

¹⁷⁹ Ibid.

¹⁸⁰ Turner, Mason & Company, 2025 Crude and Refined Products Outlook, March 2025, Appendix 3 – Price Outlook.

¹⁸¹ Ibid.

¹⁸² Wood Mackenzie, North America Crude Outlook, March 2025; Wood Mackenzie, USGC Refined Products Outlook, May 2025; Wood Mackenzie, USMC Refined Products Outlook, May 2025.

¹⁸³ Ibid.

Table 6. Third-Party Analyst Price Reports for Crude and Refined Products

Forecast Name	Report	Data Sets	Date	Data File Names
S&P Global Platts	Crude Oil Package and Fuels and Refining Package	1. North America Crude Oil Long-Term Price Outlook	1. March 11, 2025	1. North America Crude Oil Markets Long-Term Price Outlook_First Quarter 2025_11 Mar 2025.xlsx
		2. North America Refining Products Long-Term Price Outlook	2. March 11, 2025	2. North American Refining and Marketing Price and Margin Long-Term Outlook_First Quarter 2025_11 Mar 2025.xlsx
		3. North America NGL Long-Term Price Outlook	3. March 21, 2025	3. North America Price Long-term Outlook - NGL_2025-03-21T00_00_00.xlsx
		4. Base Oil Price Outlook	4. April 9, 2025	4. Base Oil Price Outlook_Data Tables_1Q25_09 Apr 2025.xlsx
RBN Energy	Future of Fuels: RFA Outlook for Crude Oil, Refined Products, Biofuels and EVs	Appendix 8 - Price Forecasts	January 31, 2025	Appendix-8_Price-Forecast.xlsx
Turner, Mason & Company	2024 Crude and Refined Products Outlook	Appendix 3 - Price Outlook	March 2025	Appendix 3 - Price Outlook.xlsx
Wood Mackenzie	[untitled]	1. North America Crude Outlook	1. March 2025	1. north-america-crude-market-price-forecasts-spo-march-2025.xlsx
		2. USGC Refined Products Outlook	2. May 2025	2. united-states-gulf-coast-product-markets-strategic-planning-outlook-prices-and-margins-may-2025.xls
		3. USMC Refined Products Outlook	3. May 2025	3. united-states-mid-continent-product-markets-strategic-planning-outlook-prices-and-margins-may-2025.xls

Sources: S&P Global Platts, Crude and Refined Products Package, North America Crude Oil Markets Price Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America Refining and Marketing Price and Margin Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America NGL Price Long-Term Outlook for 2025:Q1, March 21, 2025; S&P Global Platts, Crude and Refined Products Package, Base Oil Price Outlook for 2025:Q1, April 9, 2025; RBN Energy, Future of Fuels: RFA Outlook for Crude Oil, Refined Products, Biofuels and EVs, Volume 5, January 31, 2025, Appendix 8 – Price Forecasts; Turner, Mason & Company, 2025 Crude and Refined Products Outlook, March 2025, Appendix 3 – Price Outlook; Wood Mackenzie, North America Crude Outlook, March 2025; Wood Mackenzie, USGC Refined Products Outlook, May 2025; Wood Mackenzie, USMC Refined Products Outlook, May 2025.

114. The third-party price forecasts include projections for crude oil, refined products, and other relevant inputs and outputs across CITGO’s three refineries. These prices are industry benchmarks observed in specific spot markets, which may not precisely match the products CITGO transacts. To reconcile these benchmarks with the prices necessary to estimate CITGO’s EBITDA, I calculate a *basis* defined as the difference between CITGO’s average realized price for each product over the years 2018–2024 and the corresponding average benchmark price over the same period. A positive *basis* indicates that CITGO’s realized price exceeded the benchmark, while a negative *basis* indicates the opposite. This *basis* captures persistent structural differences, such as location, product quality, and contractual terms, that have historically caused CITGO’s realized prices (both for purchases and sales) to diverge from market benchmarks. I then apply this *basis* to the forecasted benchmark prices to derive adjusted price projections specific to CITGO.

115. For each of the third-party analyst price forecasts, I match every CITGO input and output product to a corresponding market benchmark. In many cases, the match is exact, both in terms of product specification and geography (e.g. USGC benchmarks for the Lake Charles and Corpus Christi refineries, and USMC benchmarks for the Lemont refineries). In instances where the benchmark reflects a similar (but not identical) product, the application of the *basis* corrects for any such differences as it is calculated using consistent methodology on historical prices and then applied to adjust the forecasted CITGO price relative to the marker.

116. After identifying the relevant forecasted prices for each CITGO product from each of the four third-party analyst forecasts, I construct the composite forecast as the average of the prices across the four analyst forecasts. Each provider employs distinct methodologies and assumptions, and while each individual forecast is reliable, their average offers a more robust and balanced estimate. This approach reflects the consensus view of leading market analysts and mitigates the risk of overreliance on any single methodology or assumption set.

117. All third-party forecasts used in this analysis were published in 2025, after CITGO finalized its own MTP 2025 forecasts (dated January 2025). Since that time, market expectations for future prices have changed, driven by developments in the oil industry. These revised forecasts reflect a narrowing of crack spreads compared to assumptions used in CITGO's MTP. Consequently, EBITDA projections based on updated 2025 pricing data are expected to be lower than those included in CITGO's earlier MTP forecasts, which relied on 2024 price assumptions.

118. Using the volume forecasts from CITGO's 2025 MTP (dated January 2025) and price forecasts from the four third-party sources, my projected EBITDA figures are \$1,433 million for 2025, \$1,872 million for 2026, \$2,291 million for 2027, \$2,808 million for 2028, \$3,090 million for 2029, and \$2,947 million for 2030. See **Table 7** below for further details.

119. To value PDVH's equity, I make one adjustment to the expenses based on the company's recent update in April 2025 with information from the first quarter of 2025.¹⁸⁴ PDVH estimated that standalone expenses specific to PDVH and its subsidiaries other than CITGO Holding, Inc.

¹⁸⁴ CITGO, Answers to Budget Questions, May 28, 2025 ("2025.5.28 PDVH Budget Questions REVISED.pdf").

will total \$27.52 million in 2025.¹⁸⁵ I apply this expense for the years 2025–2030, consistent with the company’s use of this expense line item in its 2025-2030 MTP. Supporting calculations for this expense item are provided in **Table 24** in **Appendix D**.

120. Adjustments to EBITDA incurred by CPC flow through to PDVH. Capital expenditures and turnaround and catalyst costs are identical for both CPC and PDVH. Accordingly, I calculate PDVH’s free cash flow by starting with PDVH EBITDA (derived from CPC EBITDA using the appropriate adjustment factor) then subtracting adjustments, capital expenditures, turnaround and catalyst expenditures, changes in working capital, and changes in long-term assets and liabilities. The calculations are summarized in **Table 7** below.

¹⁸⁵ Ibid.

Table 7. PDVH Projected EBITDA and Free Cash Flow (Composite Forecast), 2025–2030

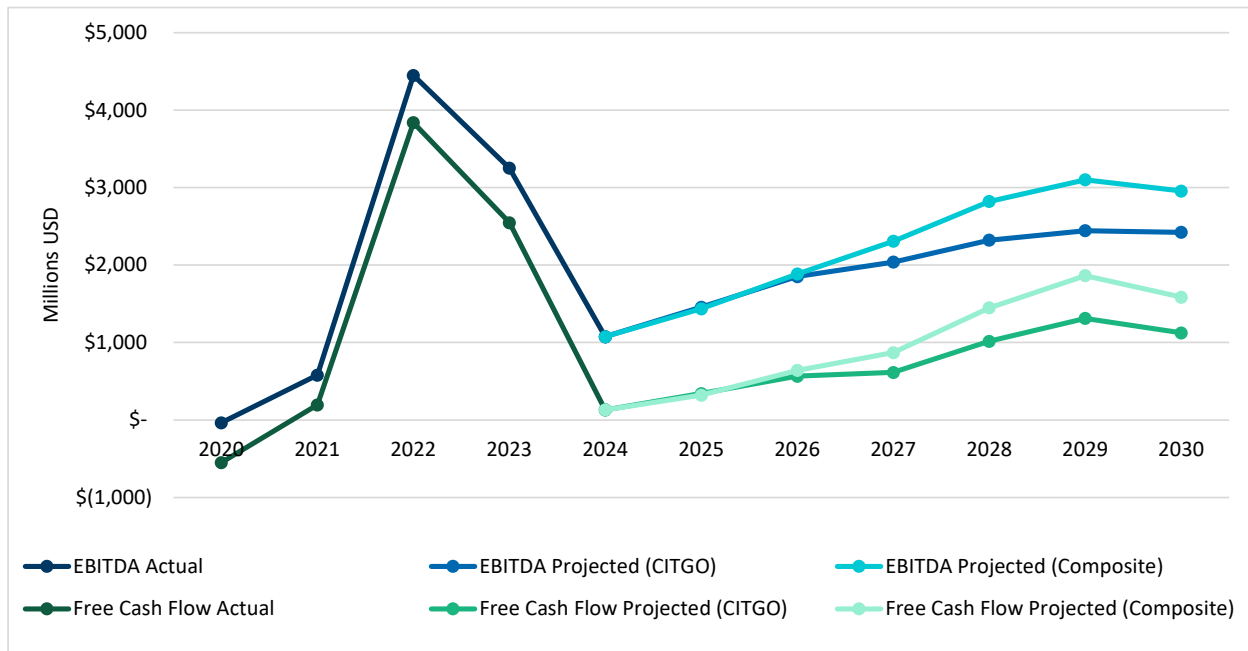
(\$ in millions USD)	2025E	2026E	2027E	2028E	2029E	2030E
Refining EBITDA						
Lake Charles Refinery	\$ 694	\$ 734	\$ 956	\$ 1,148	\$ 1,261	\$ 1,198
Lemont Refinery	447	579	607	804	869	794
Corpus Christi Refinery	182	364	509	616	699	685
Refining EBITDA	1,323	1,677	2,073	2,569	2,829	2,678
Terminals & Pipelines	196	214	223	238	246	252
Lubricants	30	34	43	47	54	58
Marketing	123	132	137	137	140	137
Product Supply	(30)	44	43	43	41	39
Asset Backed Trading	163	185	194	203	216	229
Non Refining EBITDA	482	609	639	668	698	715
Less: Corporate G&A Expense	(345)	(386)	(393)	(401)	(410)	(418)
Less: PDVH & Other Subsidiaries Expenses	(27.52)	(28)	(28)	(28)	(28)	(28)
PDVH EBITDA	1,433	1,872	2,291	2,808	3,090	2,947
Regulatory Capital Investments	(60)	(71)	(55)	(56)	(40)	(52)
Maintenance Capital Investments	(251)	(228)	(197)	(267)	(208)	(195)
Safety / Risk Mitigation Capital Investments	(44)	(47)	(36)	(41)	(22)	(49)
Turnarounds and Catalyst Expenditures	(411)	(452)	(544)	(439)	(389)	(561)
Strategic Growth Capital Investments	(181)	(237)	(299)	(142)	(69)	(30)
PDVH Pre-Tax Free Cash Flow	486	838	1,159	1,863	2,363	2,061
Taxes (2025-2030 MTP)	(167)	(206)	(301)	(425)	(506)	(482)
PDVH Post-Tax Free Cash Flow	319	631	859	1,438	1,856	1,579

Sources: CITGO, Medium Term Plan 2025-2030, January 20, 2025 (“2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf”); Evercore, Revised CITGO Financial Projections, January 26, 2025 (“Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx”) (“CITGO MTP 2025–2030”); CITGO, Answers to Budget Questions, May 28, 2025 (“2025.5.28 PDVH Budget Questions REVISED.pdf”); S&P Global Platts, Crude and Refined Products Package, North America Crude Oil Markets Price Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America Refining and Marketing Price and Margin Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America NGL Price Long-Term Outlook for 2025:Q1, March 21, 2025; S&P Global Platts, Crude and Refined Products Package, Base Oil Price Outlook for 2025:Q1, April 9, 2025; RBN Energy, Future of Fuels: RFA Outlook for Crude Oil, Refined Products, Biofuels and EVs, Volume 5, January 31, 2025, Appendix 8 – Price Forecasts; Turner, Mason & Company, 2025 Crude and Refined Products Outlook, March 2025, Appendix 3 – Price Outlook; Wood Mackenzie, North America Crude Outlook, March 2025; Wood Mackenzie, USGC Refined Products Outlook, May 2025; Wood Mackenzie, USMC Refined Products Outlook, May 2025.

Notes: PDVH & Other Subsidiaries Expenses based on company's April 2025 update. See CITGO, Answers to Budget Questions, May 28, 2025 ("2025.5.28 PDVH Budget Questions REVISED.pdf").

121. **Figure 15** below plots the PDVH adjusted EBITDA and the PDVH post-tax free cash flow, including the actual values from 2020–2024 and the projected values from 2025–2030.

Figure 15. PDVH EBITDA and Free Cash Flow, Actual and Projected (Composite Forecast), 2020–2030



Sources: [2020] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2021 and 2020, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2020, March 25, 2021, p. 5; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 13; CITGO Petroleum Corporation Annual Report 2020 for the fiscal year ended December 31, 2020, March 24, 2021, p. 56; [2021] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2021 and 2020, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2021, March 24, 2022, p. 3; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 13; CITGO Petroleum Corporation Annual Report 2020 for the fiscal year ended December 31, 2020, March 24, 2021, p. 57-58; [2022] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2022 and 2021, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2022, March 9, 2023, p. 5; CITGO Petroleum Corporation Annual Report 2022 for the fiscal year ended December 31, 2022, March 8, 2023, p. 55-56; [2023] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2023 and 2022, April 18, 2024, p. 2; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, pp. 5, 13; CITGO Petroleum Corporation Annual Report 2023 for the fiscal year ended December 31, 2023, March 6, 2024, p. 59-60; [2024] CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 5; CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, pp. 62-63; PDV Holding, Inc. Annual Report for the Fiscal Year Ended December 31, 2024, March 6, 2025, p. F-4; [2025-2030] Evercore, Revised CITGO Financial Projections, January 26, 2025 ("Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx"); CITGO, Medium Term Plan 2025-2030, January 20, 2025 ("2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf"), p. 71; CITGO, Answers to Budget Questions, May 28, 2025 ("2025.5.28 PDVH Budget Questions REVISED.pdf"); S&P Global Platts, Crude and Refined Products Package, North America Crude Oil Markets Price Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America Refining and Marketing Price and Margin Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America NGL Price Long-Term Outlook for 2025:Q1, March 21, 2025; S&P Global Platts, Crude and Refined Products Package, Base Oil Price Outlook for 2025:Q1, April 9, 2025; RBN Energy, Future of Fuels: RFA Outlook for Crude Oil, Refined Products, Biofuels and EVs, Volume 5, January 31,

2025, Appendix 8 – Price Forecasts; Turner, Mason & Company, 2025 Crude and Refined Products Outlook, March 2025, Appendix 3 – Price Outlook; Wood Mackenzie, North America Crude Outlook, March 2025; Wood Mackenzie, USGC Refined Products Outlook, May 2025; Wood Mackenzie, USMC Refined Products Outlook, May 2025.

VII. The PDVH Enterprise Value Equals \$18.6 Billion using an Income Approach

122. I was asked by Counsel to estimate the Fair Market Value (“FMV”) of PDVH’s equity. As a first step in that assignment, I calculate the PDVH enterprise value using the principles of FMV. Under Delaware law, the FMV is defined as:

The price which would be agreed upon by a willing seller and a willing buyer under usual and ordinary circumstances, after consideration of all available uses and purposes, without any compulsion upon the seller to sell or upon the buyer to buy.¹⁸⁶

123. The FMV is the price that parties would agree to in an “arm’s length transaction.”¹⁸⁷ An intercompany transaction is not representative of the value that a market transaction can deliver by a market transaction. The FMV is the price that parties would agree to when both transacting parties have “reasonable knowledge” about the asset’s underlying fundamentals.¹⁸⁸ A transaction in which one party, typically the seller, exploits its information advantage to extract rents from the transaction is inconsistent with FMV.

124. The FMV is not based on the sales process and must be agnostic to the economic mechanism used for the transaction. Further, the FMV is the price that parties would agree to

¹⁸⁶ *Poole v. N. V. Deli Maatschappij*, 243 A.2d 67, 70, n.1, 72 (Del. 1968) (adopting the “fair market value” as the valuation metric in a stock sale); *see also* Black’s Law Dictionary, Value (11th ed. 2019) (defin[ing] “fair market value” as “[t]he price that a seller is willing to accept and a buyer is willing to pay on the open market and in an arm’s-length transaction; the point at which supply and demand intersect.”); *See also* IRS, Publication 561 (02/2024), Determining the Value of Donated Property, February 2024, available at <https://www.irs.gov/publications/p561> (“FMV is the price that property would sell for on the open market. It is the price that would be agreed on between a willing buyer and a willing seller, with neither being required to act, and both having reasonable knowledge of the relevant facts.”).

¹⁸⁷ Black’s Law Dictionary, Value (11th ed. 2019).

¹⁸⁸ IRS, Publication 561 (02/2024), Determining the Value of Donated Property, December 2024, available at <https://www.irs.gov/publications/p561>.

“under usual and ordinary circumstances.”¹⁸⁹ A fire sale is not representative of usual circumstances.

A. Discounted Cash Flow (DCF) Analysis

125. Based on my experience in financial and economic expert consulting and in publishing peer-reviewed academic research, the DCF is the most reliable and consistent valuation method as it is the only one that derives the intrinsic value of a business. The DCF is the primary valuation method that I use to calculate the PDVH enterprise value.

126. The key inputs into the DCF model include forecasts of PDVH’s free cash flow in future years, the discount rate (WACC), the perpetuity growth rate, and the base free cash flow for the Perpetuity Growth Model.¹⁹⁰ I discuss reliable estimates of these model inputs in the following sections.

127. The FMV requires that the underlying parameters be calculated using the financial information of the comparable companies in the market as benchmarks. The FMV is not determined using the parameters of the target that will change with the sale. For example, a company’s Weighted Average Cost of Capital (WACC) is a company-specific rate that measures the cost that needs to be incurred to raise capital (both equity and debt). The WACC depends on both market conditions (market interest rates) and company parameters (e.g., levels of indebtedness and capacity to service its debt). Hence, each company, including CITGO, has a different WACC. The appropriate WACC to estimate the FMV is not CITGO’s WACC, but the WACC that is representative of the comparable companies in the market. This FMV requirement has two implications. First, it delivers the price at which the market values the PDVH equity, and not the value of the equity to PDVH. This is the core principle of a FMV. Second, through the

¹⁸⁹ *Poole v. N. V. Deli Maatschappij*, 243 A.2d 67, 70, n.1, 72 (Del. 1968) (adopting the “fair market value” as the valuation metric in a stock sale).

¹⁹⁰ The perpetuity growth rate is the forecasted annual growth rate of the cash flows that CITGO is projected to earn for the entire infinite future. The cash flows beyond the final period (terminal period) of the projection and into perpetuity are valued as the net present discounted value back to the terminal period. The equation for calculating the discounted value at the terminal period is the Gordon Growth Model. The Gordon Growth Model is a mathematical identity derived from the arithmetic of infinite summations. The Gordon Growth Model formula contains two parameters: the perpetuity growth rate and the discount rate (weighted average cost of capital, or WACC).

sales process, the company will be transferred from PDVSA ownership and operation to the acquirer ownership and operation. The price that an acquirer would pay to purchase the company will be reflective of the value of that company's assets in the hands of the acquirer, and not PDVSA. This is an implication of the FMV principle and ensures that the focus of the valuation is on the profitability of the company's assets, and not on the financial condition of the current owner.¹⁹¹

128. In a transaction (M&A), a valuation to estimate the purchase price would typically use the acquiring company's WACC. This case is different. My assignment was to calculate the FMV, which requires using the market WACC, and the use of fair market value is consistent with the facts of the situation. First, I do not have detailed financial plans for how the acquirer will incorporate the acquired equity into its financial and business operations, as you normally would in a traditional M&A. Second, the evaluation of the sales process under Delaware law requires a comparison of the purchase price to the FMV, and my analysis provides that latter value.

129. The prevailing approach of valuing a company is based on the principle that a firm's enterprise value is equal to the net present value of its future cash flows. The future economic benefits are discounted to the valuation date using a discount rate that incorporates the time value of money and the risks of those future cash flows. The discount rate that is typically used is the WACC. The WACC is the weighted average of the cost of equity and the after-tax cost of debt, where the weights are the proportion of a firm's equity and debt, respectively. The WACC equation is represented mathematically by:

$$WACC = \frac{E}{E + D} * C_e + \frac{D}{E + D} * C_d * (1 - t),$$

where E is the firm's equity, D is the firm's debt, C_e is the cost of equity, C_d is the pre-tax cost of debt, and t is the tax rate that the firm pays on its earnings.

¹⁹¹ For example, PDVH is owned by the Venezuela-based PDVSA. The financial conditions, including debts and liabilities, of PDVSA, have no effect on the FMV of the PDVH enterprise, provided that such PDVSA debts and liabilities are not acquired in the PDVH equity sale.

130. The cost of equity is estimated using the Capital Asset Pricing Model (CAPM), which posits that the return to equity is the sum of the risk-free rate (the return of a risk-free asset like a 20-year Treasury bond), an equity premium to reflect its additional risk (the return of equity in excess of the risk-free rate), and a factor that such premium varies depending on the industry being considered. The CAPM formula is represented mathematically by:

$$C_e = r_f + \beta * (EMR - r_f),$$

where r_f is the risk-free rate, β (beta) is the variable that measures the correlation of the firm's stock with the overall market return (the return of the S&P 500, for example), and EMR is the expected market return ($EMR - r_f$ is the market risk premium, i.e., the excess return from equity relative to the risk-free rate).

1. Comparable Companies

131. A fair market valuation requires the parameters in the WACC formula to reflect the “market” and not the firm being valued. Thus, it is sensitive to the list of “comparable” companies used to estimate them.

132. I identify the most comparable companies to use in the fair market valuation. While CITGO used to receive all or most of its crude oil from Venezuela (an “integrated” petroleum refiner), it no longer receives crude from Venezuela and is thus now classified as an “independent” petroleum refiner. Industry analysts identify eight publicly traded independent petroleum refiners that own and operate refineries in the United States: Marathon Petroleum Corporation (“Marathon Petroleum”), Phillips 66, Valero Energy Corporation (“Valero”), HF Sinclair Corporation (“Sinclair”), PBF Energy Inc (“PBF”), CVR Energy Inc (“CVR”), Delek US Holdings Inc (“Delek”), and Par Pacific Holdings Inc (“Par Pacific”). These companies are publicly traded, and their yearly and quarterly earnings reports provide detailed information about revenues, debt, equity, and other financial information that I rely upon for my analysis.

133. However, not all these independent refiners are comparable to CITGO. It is not appropriate to include all independent refiners as some of those may be unlike CITGO. I must identify companies that are economically like CITGO, to estimate its enterprise value.

134. I evaluate the independent refiners based on four criteria: capacity, complexity, regional diversity, and maritime access. Capacity refers to the total crude capacity of all the US refineries owned by each company. Complexity refers to the weighted average of the Nelson Complexity Index (“NCI”) across all refineries owned by each company, where the NCI is a measure used by oil practitioners to describe the secondary conversion capacity of a refinery.¹⁹² The higher a refinery’s NCI, the more it can convert low-value inputs into high-value products. Regional diversity refers to the number of PADD regions in which the company owns and operates a refinery. Regional diversity provides insurance against market price movements as crude prices vary significantly by region. Finally, maritime access refers to whether the company owns a refinery with access to a waterway, such as an ocean, gulf, or inland river or canal. **Table 8** below tabulates the information for capacity, complexity (NCI), PADD regions, and maritime access for all eight publicly traded independent refiners in the United States. CITGO has the fifth largest capacity and the third highest complexity among the nine companies. CITGO, like the larger refiners, has maritime access and owns refineries in multiple PADD regions, whereas the two smaller refiners, Delek and CVR, do not have maritime access and have refineries in only one PADD region.

¹⁹² U.S. Energy Information Administration, “Petroleum refineries vary by level of complexity,” October 11, 2012, accessed October 17, 2024, available at <https://www.eia.gov/todayinenergy/detail.php?id=8330>.

Table 8. Summary of CITGO Compared to Publicly Traded Independent Refiners in the United States

Company	Count	PADD	Distillation Capacity (thousands barrels per day)	Nelson Complexity Index	Equivalent Distillation Capacity	Maritime Access
Marathon	15	2, 3, 4, 5	2,901	11.71	33,976	Y
Valero	12	2, 3, 5	2,181	13.78	30,048	Y
Phillips 66	6	1, 2, 3, 4, 5	1,147	10.76	12,337	Y
HF Sinclair	6	2, 3, 4, 5	578	12.07	6,977	Y
PBF	6	1, 2, 3, 5	1,001	16.13	16,150	Y
CITGO	3	2, 3	754	13.53	10,198	Y
Delek	3	3	235	10.83	2,544	N
CVR	2	2	207	11.78	2,432	N
Par Pacific	4	4, 5	211	7.35	1,550	Y

Sources: S&P Platts.

135. As shown in **Table 8** above, the companies that are comparable in both capacity¹⁹³ and complexity to CITGO are Marathon, Phillips 66, Valero, HF Sinclair, and PBF.¹⁹⁴ These are the companies CITGO generally uses for benchmarking and forecasting in the ordinary course of business. Thus, by the company's determination and the economic incentive to choose the most reliable set of comparable companies to generate the most accurate forecasts and budgets, the company has determined that these five companies are the most economically comparable to CITGO.

136. The equity values (market capitalizations) for Marathon, Phillips 66, Valero, HF Sinclair, and PBF as of July 3, 2025, are \$54.1 billion, \$51.9 billion, \$45.3 billion, \$8.3 billion, and \$2.8

¹⁹³ Multi decade statistical studies, engineering scaling laws, modern capex data and industry commentary indicate that the long run average cost curve of a refinery is U shaped with a nearly flat bottom between 250 and 600 thousand barrels per day. See Manfred Hafner and Giacomo Luciani, *The Palgrave Handbook of International Energy Economics*, Springer Nature, 2022.

¹⁹⁴ These five independent refiners all have maritime access, same as CITGO, with HF Sinclair's acquisition of the Puget Sound refinery in Washington being the first of its refineries to have maritime access.

billion, respectively.¹⁹⁵ CITGO's equity value is \$18.6 billion, which is the fourth-largest equity value within this group.

137. As shown in **Table 8** above, CVR, Delek, and Par Pacific have been excluded from the list of most comparable companies because these companies have significantly less capacity and less complexity than the three CITGO refineries. In addition, these three companies are economically dissimilar from CITGO in the following three ways. First, CITGO is a branded company with branded retail locations (4,000 in the United States), like Marathon, Valero, Phillips 66, and HF Sinclair. Second, CITGO owns and operates significant midstream assets, including pipelines and terminals, like Marathon, Valero, Phillips 66, HF Sinclair, and PBF. Third, CITGO's equity value is \$18.6 billion, and this makes CITGO far larger than CVR, Delek, and Par Pacific, which have equity values (market capitalizations) as of July 3, 2025, equal to \$3.0 billion, \$1.4 billion, and \$1.6 billion, respectively.¹⁹⁶

2. Weighted Average Cost of Capital (WACC)

138. The cost of capital is determined using the CAPM. A key parameter for the CAPM is a company's beta, which measures the correlation between its return and the stock market's return. **Table 9** below reports the most recent betas for the five most comparable companies. The betas are reported as of July 7, 2025, and are provided by Bloomberg. The betas are calculated by Bloomberg using returns data for the past two years, specifically calculating the ratio of the covariance of weekly company stock returns and weekly returns of the S&P 500 over the two years prior, and the variance of weekly returns of the S&P 500 over the two years prior.¹⁹⁷ For the five most comparable companies, I rely on available data for the company's equity beta.¹⁹⁸

¹⁹⁵ CapIQ.

¹⁹⁶ CapIQ.

¹⁹⁷ A two-year lookback window is appropriate as it excludes the anomalous market conditions associated with the COVID-19 pandemic, which are not representative of expected future stock returns for either the company or the S&P 500. A five-year lookback period would capture most of 2020 and all of 2021, years that were significantly distorted by the COVID-19 pandemic. Beta estimates are inherently backward-looking. To better reflect future risks, the reported equity betas are adjusted using a weighted average of the raw beta and the long-run mean beta of 1. Specifically, the adjusted beta is calculated as two-thirds of the raw beta and one-third of the mean-reverting value of 1.

¹⁹⁸ Bloomberg.

139. The median of the equity betas across the five most comparable companies is 1.009.

Table 9. Betas for Comparable Companies

Equity Beta	
Marathon Petroleum Corporation	0.926
Phillips 66	1.016
Valero Energy Corporation	1.009
HF Sinclair Corporation	0.984
PBF Energy Inc.	1.061
Median	1.009
Average	0.999
Standard Deviation	0.049
Coefficient of Variation	0.049

Sources: Bloomberg, CapIQ.

140. I estimate the cost of capital from the CAPM. The details of the calculation are illustrated in **Table 12** below. The risk-free rate is assumed to be 4.87%, which is the average of the daily yield on a 20-year treasury security over the three-month period from April 4, 2025, to July 3, 2025.¹⁹⁹ While the economic concept of the equity risk premium is straightforward (it is the price of risk in equity markets), estimating it is challenging. Some analysts rely on historical data while others trust surveys. Professor Aswath Damodaran of NYU, one of the most well-known experts in the field of valuation, uses different approaches, and estimates that the equity risk premium was 4.21% as of July 2025.²⁰⁰ I rely on Damodaran's estimate (4.21%) because its methodology is economically consistent and the database that he relies upon to estimate it is publicly available. I use the equity beta value of 1.045 (as previously calculated). The cost of equity (from the CAPM)

¹⁹⁹ Board of Governors of the Federal Reserve System (US), Market Yield on U.S. Treasury Securities at 20-Year Constant Maturity, quoted on an Investment Basis [DGS20], retrieved from FRED, Federal Reserve Bank of St. Louis, July 6, 2025, available at <https://fred.stlouisfed.org/series/DGS20> and U.S. Department of the Treasury, Daily Treasury Par Yield Curve Rates at 20-Year Constant Maturity for July 3, 2025, accessed July 7, 2025, available at https://home.treasury.gov/resource-center/data-chart-center/interest-rates/TextView?type=daily_treasury_yield_curve&field=tdr_date_value_month=202507.

²⁰⁰ Aswath Damodaran, "Implied ERP for June 2025," accessed June 11, 2025, Trailing 12 month cash yield, available at <https://pages.stern.nyu.edu/~adamodar/>.

equals the risk-free rate (4.87%) plus the product of beta (1.009) and the equity risk premium (4.21%), or 9.12% (see **Table 12** below).

141. A FMV requires applying the cost of debt for the five most comparable companies. Companies report the details of their debt structure in their earnings reports, including the principal owed and the interest rates for the bond notes used by the companies to finance their debt.²⁰¹ The reported interest rates determine the pre-tax cost of debt. The pre-tax cost of debt is calculated as the interest rate charged for the most recent bond notes that the company has outstanding (calculated as the maximum over the most recent bond notes if the interest rates differ for the most recently issued debt).

142. **Table 10** below reports the pre-tax cost of debt for the five most comparable companies, as of 2025:Q1 financial reporting. The median pre-tax cost of debt equals 8.13%.

143. I use a marginal tax rate of 25.77%, sourced from Professor Aswath Damodaran of NYU, for the five most comparable companies listed in **Table 10**.²⁰² Professor Damodaran explains that effective tax rates reported in financial statements often differ from marginal tax rates due to factors such as differing accounting standards, tax credits, tax deferrals, and progressive tax

²⁰¹ CapIQ.

²⁰² Aswath Damodaran, "Corporate Marginal Tax Rates – By country," January 2025, accessed June 11, 2025, available at https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/countrytaxrates.html.

structure.²⁰³ He argues that these differences are not sustainable in perpetuity, making marginal tax rates more appropriate for valuation purposes.²⁰⁴

144. Using the pre-tax cost of debt and the marginal tax rate, I calculate the after-tax cost of debt. The median value of the after-tax cost of debt equals 6.03%.

²⁰³ Aswath Damodaran, “More on effective tax rates,” accessed June 11, 2025, available at https://pages.stern.nyu.edu/~adamodar/New_Home_Page/valquestions/taxrate.htm (“Given that most of the taxable income of publicly traded firms is at the highest marginal tax bracket, why would a firm’s effective tax rate be different from its marginal tax rate? There are at least three reasons:

1. Many firms, at least in the United States, follow different accounting standards for tax and reporting purposes. For instance, firms often use straight line depreciation for reporting purposes and accelerated depreciation for tax purposes. As a consequence, the reported income is significantly higher than the taxable income, on which taxes are based.
2. Firms sometimes use tax credits to reduce the taxes they pay. These credits, in turn, can reduce the effective tax rate below the marginal tax rate.
3. Finally, firms can sometimes defer taxes on income to future periods. If firms defer taxes, the taxes paid in the current period will be at a rate lower than the marginal tax rate. In a later period, however, when the firm pays the deferred taxes, the effective tax rate will be higher than the marginal tax rate.”).

²⁰⁴ Aswath Damodaran, “More on effective tax rates,” accessed June 11, 2025, available at https://pages.stern.nyu.edu/~adamodar/New_Home_Page/valquestions/taxrate.htm (“In valuing a firm, should you use the marginal or the effective tax rates? If the same tax rate has to be applied to earnings every period, the safer choice is the marginal tax rate because none of the reasons noted above can be sustained in perpetuity. As new capital expenditures taper off, the difference between reported and tax income will narrow; tax credits are seldom perpetual; and firms eventually do have to pay their deferred taxes.”). *See also* Aswath Damodaran, “Tax rate slides,” accessed June 11, 2025, available at <https://people.stern.nyu.edu/adamodar/podcasts/valfall15/valsession8.pdf>, p. 124 (“The choice really is between the effective and the marginal tax rate. In doing projections, it is far safer to use the marginal tax rate since the effective tax rate is really a reflection of the difference between the accounting and the tax books. By using the marginal tax rate, we tend to understate the after-tax operating income in the earlier years, but the after-tax operating income is more accurate in later years.”).

Table 10. Cost of Debt for Comparable Companies

	Pre-Tax Cost of Debt	Marginal Tax Rate	After-Tax Cost of Debt
Marathon Petroleum Corporation	6.50%	25.77%	4.83%
Phillips 66	8.13%	25.77%	6.03%
Valero Energy Corporation	10.50%	25.77%	7.79%
HF Sinclair Corporation	6.38%	25.77%	4.73%
PBF Energy Inc.	9.35%	25.77%	6.94%
Median	8.13%		6.03%
Average	8.17%		6.06%
Standard Deviation	1.79%		1.33%
Coefficient of Variation	0.22		0.22

Sources: CapIQ, Aswath Damodaran, “Corporate Marginal Tax Rates – By country,” January 2025, accessed June 11, 2025, available at https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/countrytaxrates.html.

Notes: The weighted average interest rate across all bonds is used for PBF (marked with a black border). For all other companies, the weighted average interest rate across all bonds is lower than the maximum of the interest rates on recently issued bonds.

145. The weighted average cost of capital (WACC) is calculated as the weighted average of the cost of equity (9.12%) and the cost of debt (6.03%) using the debt ratio and the equity ratio as the weights for the equation. I rely upon the market values for the equity of the five most comparable companies. Specifically, I rely on the most recent market capitalizations for the companies as these represent the values that the companies’ equity would trade for in the market (known as “market value”). For the companies’ debt, I rely on the total debt as reported by the companies on their balance sheets (known as “book value”).

146. **Table 11** below reports the debt-to-equity ratio for the five most comparable companies. The ratios are reported using the most recent quarter of financial reporting (2025:Q1) and the stock prices in the market as of July 3, 2025. The FMV estimate of the debt-to-equity ratio is the median of the ratios for the five most comparable companies. The median value of the debt-to-equity ratio equals 37.99%. The median value of the debt ratio equals 27.53%, where the debt ratio is defined as the ratio of debt to total capital (debt plus equity). This debt ratio is the weight applied to the

cost of debt in the WACC equation. The equity ratio is one minus the debt ratio and equals 72.47%,²⁰⁵ which is the weight applied to the cost of equity in the WACC equation.

Table 11. Debt Ratios for Comparable Companies

(\$ in millions)	Debt	Equity	Debt-to-Equity Ratio	Debt Ratio
Marathon Petroleum Corporation	\$ 32,137	\$ 54,085	59.42%	37.27%
Phillips 66	\$ 18,803	\$ 51,863	36.26%	26.61%
Valero Energy Corporation	\$ 10,854	\$ 45,283	23.97%	19.33%
HF Sinclair Corporation	\$ 3,161	\$ 8,320	37.99%	27.53%
PBF Energy Inc.	\$ 3,102	\$ 2,787	111.28%	52.67%
Median			37.99%	27.53%

Source: CapIQ.

147. **Table 12** below reports the calculation of the WACC. The cost of equity is 9.12%, the cost of debt is 6.03%, the debt weight is 27.53%, and the equity weight is 72.47%. The WACC is therefore calculated to be equal to 8.27%.

Table 12. WACC Calculation

Risk-free Rate	4.87%
Equity Beta	1.009
Market Risk Premium	4.21%
Cost of Equity	9.12%
Pre-Tax Cost of Debt	8.13%
Tax Rate	25.77%
Cost of Debt	6.03%
Debt Weight	27.53%
Equity Weight	72.47%
Weighted Average Cost of Capital (WACC)	8.27%

Sources: CapIQ, Bloomberg.

²⁰⁵ $1 - 27.53\% = 72.47\%$.

3. Perpetuity Growth (Gordon Growth Model)

148. The perpetuity growth rate is the forecasted annual growth rate of the cash flows that CITGO is projected to earn into perpetuity. My DCF analysis applies a Perpetuity Growth Model in which the dynamics of company profitability beyond the terminal period are modeled explicitly. The equation for calculating the discounted value at the terminal period is the Gordon Growth Model, which is a mathematical identity derived from the arithmetic of infinite summations. The Gordon Growth Model formula contains two parameters: the perpetuity growth rate and the discount rate (WACC).

149. Delaware courts have held that appropriate perpetuity growth rates in discounted cash flow analyses fall within a range bounded by the long-term inflation rate at the lower end (reflecting zero real growth) and the sum of the inflation rate and the growth rate of real output at the upper end.²⁰⁶

150. Following the methodology endorsed by Delaware courts, I use a perpetuity growth rate of at least 2.0% in my DCF valuation. From 2000 to 2024, the average inflation rate in the US was 2.58%.²⁰⁷ On the other hand, the IEA projects that global oil demand will decline at an average annual rate of 0.44% during the 2030–2050 period.²⁰⁸ Combining these two figures—a 2.58% nominal price growth and a -0.44% real volume growth—yields an implied perpetuity growth rate of 2.14% for the oil sector. This estimate falls within the range commonly accepted by Delaware courts, which spans from the inflation rate (representing zero real growth) to the sum of inflation and expected real output growth.

151. In my DCF analysis, I adopt a perpetuity growth rate of 2.0% per year for PDVH's free cash flows. This figure reflects a conservative application of the court-endorsed methodology and is consistent with long-term inflation expectations and projected trends in oil demand.

²⁰⁶ See **Appendix C**.

²⁰⁷ U.S. Bureau of Labor Statistics, Inflation, consumer prices for the United States [FPCPITOTLZGUSA], retrieved from FRED, Federal Reserve Bank of St. Louis, June 5, 2025, available at <https://fred.stlouisfed.org/series/FPCPITOTLZGUSA>. See **Table 21** in **Appendix C**.

²⁰⁸ International Energy Agency, "2024 World Energy Outlook," October 2024, available at <https://www.iea.org/reports/world-energy-outlook-2024>. See **Table 21** in **Appendix C**.

4. Base Free Cash Flow for Perpetuity Growth Formula

152. In a stable commodity market, a firm's free cash flow ("FCF") is expected to rise steadily year-over-year. Accordingly, analysts often treat the FCF in the final forecast year as the "base" cash flow for the period beyond the terminal horizon, on the premise that it reflects a normalized operating level from which perpetual growth can be projected.

153. The refining industry is more volatile than the economy as a whole. Given this volatility, I estimate the terminal value as the *average* FCF generated over the period 2026-2030. This approach yields a more reliable indicator of long-run, sustainable performance than reliance on a single year.

154. I understand that the company has made investments in capital projects that will have a positive impact on future earnings.²⁰⁹ The company's Medium-Term Plan (MTP) for 2025-2030 budgets \$958 million in strategic growth capital expenditures.²¹⁰ Management projects that these investments will lift annual EBITDA by at least \$613 million by 2030, and more broadly profit enhancing initiatives including capital investments are anticipated to increase annual EBITDA by about \$786 million.²¹¹

155. Management has also identified further opportunities—currently under evaluation—that would require \$528 million in capital outlays between 2025 and 2030. These projects are forecast to increase annual EBITDA by \$237 million at the refinery level and by no less than \$293 million across the enterprise by 2030.²¹²

156. Given these strategic capital investments, both budgeted and under evaluation, my model of the terminal value is conservative for two reasons. First, the budgeted capital expenditures in

²⁰⁹ See, e.g., Additional Details to Support Capital Program Flash Update, July 22, 2024, Earnings Profile ("2024.7.22 Additional Info to Support Capital Project Flash Update confidential provided"), p. 2; Project Horizon, Management Presentation, January 27, 2025 ("2025.1.27 Project Horizon_Management Presentation (Jan 2025) FINAL.pdf"), pp. 81, 89.

²¹⁰ Evercore, Revised CITGO Financial Projections, January 26, 2025 ("Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx"). See also CITGO, Medium Term Plan 2025–2030, January 20, 2025 ("2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf"), pp. 55, 58 ("Strategic Spending for 2025-2030 equals \$988 MM").

²¹¹ CITGO, Medium Term Plan 2025–2030, January 20, 2025 ("2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf"), p. 55 ("Benefit - \$625 MM/yr"), p. 58 ("EBITDA Growth from Strategic Projects (ex ABT), equals \$613 MM/yr"), p. 66 ("Incremental EBITDA 2025-2030 Medium Term Plan (by 2030) \$786 MM/year").

²¹² Id., p. 65 ("TIC (\$MM) equal to 528" in total for the three refineries and "Annual EBITDA (\$MM) equal to 237" in total for the three refineries); Id., p. 66 ("Incremental EBITDA Further Opportunities \$293+ MM/year").

the MTP are forecasted to increase EBITDA by \$786 million by 2030.²¹³ However, those EBITDA gains are largely realized in the final two years of the period (in 2029 and 2030). However, my terminal value is the average free cash flow over the five-year period 2026–2030. This average does not fully capture the increment in EBITDA resulting from the budgeted capital expenditures that will be realized by 2030, and thus underestimates the company’s free cash flow that is expected in 2031 and through perpetuity. Second, the capital investments under evaluation are not included in the company’s MTP forecast of volumes, and thus not included in my forecasts for the years 2026–2030. As such, the terminal value free cash flow does not account for the incremental EBITDA from the capital investments under evaluation (estimated to be at least \$293 million per year by 2030),²¹⁴ and thus underestimates the company’s free cash flow that is expected in 2031 and through perpetuity.

5. The Valuation Date is March 31, 2025

157. The valuation date is March 31, 2025. This is the date of the most recent actual financial information for CITGO and for the five most comparable companies. It is standard practice in valuation to select the valuation date based upon the date through which actual data is available. Actual data is available through March 31, 2025. Thereafter, the EBITDA and free cash flow are based on forecasts. Valuing the forecasted EBITDA and free cash flow as of the valuation date of March 31, 2025, represents an ex-ante analysis of the net present value of future (projected) free cash flow, which is the correct approach for implementing the DCF analysis. The financial information that serves as the basis for the calculation of the WACC is updated more frequently than once per quarter. The inputs used to calculate WACC are based on the most recent financial information (market capitalization as of July 3, 2025, betas as of July 7, 2025, equity risk premium as of July 1, 2025, and risk-free rate as of July 3, 2025).

158. The DCF analysis is calculated by relying upon the forecasts for March 31, 2025 – December 31, 2030, and then applying the Gordon Growth Model to estimate the terminal value

²¹³ Id., p. 66 (“Incremental EBITDA 2025-2030 Medium Term Plan (by 2030) \$786 MM/year”).

²¹⁴ Id., p. 66 (“Incremental EBITDA Further Opportunities \$293+ MM/year”).

that represents the net present value of cash flows from the end of the terminal period (December 31, 2030) through perpetuity. The terminal value is valued as of December 31, 2030 (the last day of the terminal period).

159. For ease of exposition I refer to the final 3 quarters (last 9 months or “L9M”) of 2025 as 2025:L9M. The DCF valuation includes the forecast for 2025:L9M, but does not include 2025:Q1 as that is prior to the valuation date of March 31, 2025.

6. The PDVH Enterprise Value Equals \$18.6 Billion using the DCF Analysis

160. CITGO provided an update to its MTP based on its actual performance in 2025:Q1.²¹⁵ The update provided by CITGO includes an updated forecast for 2025.²¹⁶ The CITGO update for 2025 includes updated estimates of refinery EBITDA, non-refinery EBITDA, corporate expenses, total for capex and turnaround, and changes in working capital. The CITGO update includes both the 2025:Q1 actuals for each of these accounting items and the full-year forecast for 2025. I take the difference between the full-year forecast and the actuals from 2025:Q1 to derive the company forecast for 2025:L9M.

161. The CITGO updated forecast for 2025 does not include updates for the taxes. I calculate the 2025 and 2025:Q1A taxes by applying the 23% tax rate from the CITGO MTP to pre-tax income. The detailed calculations are present in **Table 28** of the Appendix. I take the difference between the full-year taxes and the taxes from 2025:Q1 to derive the taxes for 2025:L9M.

162. For projected future profitability, I rely on CITGO’s 2025–2030 MTP forecast and third-party analyst price forecasts. For all years 2026–2030, I apply the company’s MTP forecast for volumes and the third-party analyst price forecasts to estimate refinery gross margins. For all years 2026–2030, I then include the company’s MTP forecast for refinery expenses and the company’s MTP forecast for non-refinery revenues and costs to estimate total company EBITDA and free cash flow.

²¹⁵ CITGO, Q1 Presentation, April 30, 2025 (“2025.5.1 BOD Meeting - 1Q 2025 BOD Presentation Final.pdf_Highly Confidential - Clean Team Restricted.pdf”).

²¹⁶ Ibid.

163. For the forecast for the year 2025, CITGO's recent earnings update based on 2025:Q1 actuals provides the company's forecast for refinery EBITDA, non-refinery EBITDA, corporate expenses, capex, and turnaround, and changes in working capital for the rest of 2025. The method described for the years 2026–2030 (applying the company's MTP forecast for volumes and third-party analyst forecasts for prices) is also applied for 2025 to estimate refinery EBITDA for the full-year 2025. I take the average of the full-year 2025 refinery EBITDA from the third-party price forecast method and the full-year 2025 refinery EBITDA from the company's updated forecast.²¹⁷ I then subtract off the 2025:Q1 actuals for refinery EBITDA to estimate the refinery EBITDA for 2025:L9M. For all other inputs of the EBITDA and free cash flow forecast (non-refinery EBITDA, corporate expenses, capex and turnaround, changes in working capital, and taxes), I rely on the company's updated forecast of what those values are expected to be for 2025:L9M.

164. As previously discussed, the discount rate is the WACC and is equal to 8.27%. The perpetuity growth rate is 2.0%. The Gordon Growth Model is applied to the five-year average of the forecasted post-tax free cash flow for the years 2026–2030.

165. I apply the midyear discounting convention. The NPV of free cash flow from March 31, 2025, through December 31, 2030 equals \$5,411 million.

166. The terminal value represents the NPV of the free cash flow from January 1, 2031 through perpetuity, valued on December 31, 2030. The terminal value is calculated by applying the Gordon Growth model equation to the average of the free cash flow estimated for 2026–2030.²¹⁸ The terminal period free cash flow equals \$1,282 million. The discount rate is 8.27%. The perpetuity growth rate is 2.0%. Applying the Gordon Growth Model equation, I calculate that the terminal value equals \$20,857 million (valued as of December 31, 2030).

²¹⁷ The third-party analyst price forecasts that I rely upon are the most recent, prepared by the third-party analysts in 2025. Thus, they reflect some of the new market information related to the volatility, uncertainty, and market disruption created by the Administration's tariffs. CITGO's updated 2025 forecast prepared after the first quarter earnings report also includes some of the new market information related to the volatility, uncertainty, and market disruption from the Administration's tariffs.

²¹⁸ The Gordon Growth Model equation determines that the terminal value = (base free cash flow) * (1 + perpetuity growth rate) ÷ (discount rate – perpetuity growth rate).

167. The terminal value is valued at December 31, 2030, which is 5 years and 9 months after the valuation date of March 31, 2025. The NPV of the terminal value (valued at the valuation date of March 31, 2025) equals \$13,210 million. The split between the NPV for the forecast period (March 31, 2025 – December 31, 2030) and the NPV for the terminal value equals 29.06% for the forecast period and 70.94% for the terminal value. In my experience, this split is appropriate and reliable for valuation of a company's enterprise value. The PDVH enterprise value equals the sum of the NPV for the forecast period (March 31, 2025 – December 31, 2030) and the NPV for the terminal value, or \$18,620 million. See **Table 13** below.

Table 13. DCF Analysis of PDVH Enterprise Value (Composite Forecast)

	2025 [A]	2025:Q1A [B]	2025:L9ME [C]	2026E	2027E	2028E	2029E	2030E	Terminal
(\$ in millions USD)									
Lake Charles Refinery	\$ 695			\$ 738	\$ 963	\$ 1,155	\$ 1,266	\$ 1,203	
Lemont Refinery	447			583	610	806	870	795	
Corpus Christi Refinery	183			367	515	620	703	689	
Refining EBITDA (Composite Forecast)	1,325			1,689	2,089	2,581	2,839	2,687	
CITGO Refining 2025 Updated Forecast	1,080								
Average Refining EBITDA	1,203			1,689	2,089	2,581	2,839	2,687	
Terminals & Pipelines				214	223	238	246	252	
Lubricants				34	43	47	54	58	
Marketing				132	137	137	140	137	
Product Supply				44	43	43	41	39	
Asset Backed Trading				185	194	203	216	229	
Non Refining EBITDA	332			609	639	668	698	715	
Corporate G&A Expense	(317)			(386)	(393)	(401)	(410)	(418)	
PDVH & Other Subsidiaries Expenses				(28)	(28)	(28)	(28)	(28)	
PDVH EBITDA	1,218			1,884	2,307	2,821	3,101	2,956	
Regulatory Capital Investments				(71)	(55)	(56)	(40)	(52)	
Maintenance Capital Investments				(228)	(197)	(267)	(208)	(195)	
Safety / Risk Mitigation Capital Investments				(47)	(36)	(41)	(22)	(49)	
Turnarounds and Catalyst Expenditures				(452)	(544)	(439)	(389)	(561)	
Strategic Growth Capital Investments				(237)	(299)	(142)	(69)	(30)	
Total Capex and Turnaround	(958)			(1,035)	(1,132)	(945)	(728)	(886)	
Changes in Working Capital	0								
PDVH Free Cash Flow (Pre-Tax)	260	(468)	728	850	1,175	1,876	2,373	2,070	
Taxes	(74)			(209)	(305)	(428)	(509)	(484)	
PDVH Free Cash Flow (Post-Tax)	185			640	870	1,448	1,864	1,586	1,282
Years	3/31/2025		0.375	1.25	2.25	3.25	4.25	5.25	5.75
Discount Factor	8.27%		0.971	0.905	0.836	0.772	0.713	0.659	0.633
Perpetuity Growth	2.00%								\$ 20,857
NPV (2025-2030)	\$ 5,411								
NPV (Perpetuity)	\$ 13,210								
NPV (Total)	\$ 18,620								

Sources: [A] and [B]: CITGO, Q1 Presentation, (“2025.5.1 BOD Meeting - 1Q 2025 BOD Presentation Final.pdf_Highly Confidential - Clean Team Restricted.pdf”), April 30, 2025, p. 61; [C] = [A] – [B]; 2026-2030: CITGO, Medium Term Plan 2025–2030, January 20, 2025 (“2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf”), pp. 71-72; Evercore, Revised CITGO Financial Projections, January 26, 2025 (“Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx”); CITGO, Answers to Budget Questions, May 28, 2025 (“2025.5.28 PDVH Budget Questions REVISED.pdf”); S&P Global Platts, Crude and Refined Products Package, North America Crude Oil Markets Price Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America Refining and Marketing Price and Margin Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America NGL Price Long-Term Outlook for 2025:Q1, March 21, 2025; S&P Global Platts, Crude and Refined Products Package, Base Oil Price Outlook for 2025:Q1, April 9, 2025; RBN Energy, Future of Fuels: RFA Outlook for Crude Oil, Refined Products, Biofuels and EVs, Volume 5, January 31, 2025, Appendix 8 – Price Forecasts; Turner, Mason & Company, 2025 Crude and Refined Products Outlook, March 2025, Appendix 3 – Price Outlook; Wood Mackenzie, North America Crude Outlook, March 2025; Wood Mackenzie, USGC Refined Products Outlook, May 2025; Wood Mackenzie, USMC Refined Products Outlook, May 2025.

B. My DCF Valuation is Consistent with a Corrected Version of Evercore's September 2023 DCF Valuation Showing an Enterprise Value of \$16.9 Billion

168. Evercore developed its DCF valuation in September 2023, based on CPC's MTP 2023–2028, prepared in October 2022.²¹⁹ My DCF analysis is based on the volume forecasts from the company's 2025–2030 MTP and the composite price forecasts. The company's 2025–2030 MTP is the company's most recent forecast and includes two additional forecast years relative to what Evercore relied upon in September 2023. Evercore's DCF valuation is a useful point of comparison to my estimate after applying a few corrections to account for the passage of time and a disagreement about the long run prospects of the industry where our position is conservative.

169. According to its description, Evercore's CITGO Valuation Report “[d]iscounted the projected cash flows to December 31, 2023 to compute total Enterprise Value” using “WACC discount rates” ranging from “8.5% to 9.0% based on the capital asset pricing model.”²²⁰ However, Evercore's actual WACC calculations—using the CAPM and a comparable companies analysis—yielded a discount rate range of 8.6% to 9.0%.²²¹ Despite this, Evercore applied the DCF model using WACC values in the range of 9.00% to 9.50%, with a midpoint of 9.25%²²² rather than the “8.5% to 9.0%” range it claimed.²²³

170. Evercore produced a spreadsheet containing the hard-coded inputs for its DCF analysis covering the forecast years 2024–2028.²²⁴ Although the values are hardcoded, I was able to reverse-engineer Evercore's calculations. The terminal period is 2028, with the terminal value dated as of December 31, 2028. This terminal value represents the NPV of all future free cash flows from December 31, 2028, onward, projected into perpetuity. Evercore estimates the terminal

²¹⁹ Compare Evercore, CITGO Valuation Report, September 14, 2023 (“CITGO Valuation Slides_v2023.09.14.pdf”), p. 7 and CITGO, Medium Term Plan 2024-2029, October 10, 2023 (“2023.11.6 MTP 2024-2029 OpCom 10 Oct 2023 updated and integrated.pdf”), p. 74. The 2024 CITGO MTP was released October 10, 2023. I understand that the 2023 CITGO MTP was released in October 2022.

²²⁰ Evercore, CITGO Valuation Report, September 14, 2023 (“CITGO Valuation Slides_v2023.09.14.pdf”), p. 5.

²²¹ Id., p. 13.

²²² Id., p. 7.

²²³ Id., p. 5.

²²⁴ Id., p. 7.

value using two approaches: the “Exit Multiple” approach and the “Perpetuity Growth” approach.²²⁵

171. Across all valuation methods, Evercore’s valuation of PDVH’s equity was reported in its valuation report as ranging from \$10.0 to \$13.0 billion.²²⁶ Separately, media reports cited Evercore’s valuation range as \$13 to \$14 billion.²²⁷ In its DCF analysis, Evercore estimated PDVH’s enterprise value at \$13,301 million using the “Exit Multiple” approach to estimate the terminal value and \$13,166 million using the “Perpetuity Growth” model to calculate the terminal value.²²⁸ Evercore’s sensitivity analysis further provided a valuation range of \$12,076 to \$14,554 million for the “Exit Multiple” approach and \$12,352 to \$14,123 million for the “Perpetuity Growth” model.²²⁹

172. I update Evercore’s valuation in three ways. First, Evercore assumes an asset sale and models a transaction with a tax shield. Second, the discount rate used by Evercore in its DCF valuation (ranging from 9.00% – 9.50%, with a midpoint of 9.25%) is too high given its own WACC calculation, which estimates a range from 8.6% – 9.0% including a small company risk premium and a range from 8.2% – 8.6% excluding a small company risk premium. A WACC equal to 8.4% (midpoint of the range excluding a small company risk premium) is an appropriate correction. Third, the perpetuity growth rate applied by Evercore (ranging from -0.5% to +0.5%) is unrealistically low and does not reflect either the company’s historical performance or market expectations for future growth. Nominal growth at the rate of price growth is expected, at a minimum, and thus an appropriate correction is a perpetuity growth rate of 2.0%.

²²⁵ Ibid.

²²⁶ Id., p. 6.

²²⁷ Reuters, “Exclusive: Weak Bids in Citgo Auction Spurs Venezuela to Pitch Alternative Pay Plan,” March 14, 2024, accessed June 13, 2024, available at <https://www.reuters.com/business/energy/weak-bids-citgo-auction-spurs-venezuela-pitch-alternative-pay-plan-2024-03-14/> (“The weak initial bids were below the \$13 billion to \$14 billion value specialists appointed by the court had estimated for the shares.”).

²²⁸ Evercore, CITGO Valuation Report, September 14, 2023 (“CITGO Valuation Slides_v2023.09.14.pdf”), p. 7.

²²⁹ Id., p. 6.

1. Evercore Models a Transaction with a Tax Shield

173. Evercore's valuation assumes an asset sale and a step-up in basis, resulting in significant depreciation and amortization in the first year after the sale. This results in negative earnings for the acquirer in the initial year. Evercore further assumes that the resulting significant net operating loss can be carried forward (carryover losses) into subsequent tax years. Evercore applies a limit to the carryover losses that shield 80% of EBIT from taxation.²³⁰ This implies that only 20% of EBIT is taxable income, and Evercore applies a 23% tax rate on that taxable income. These calculations are described in the Evercore materials, and I confirmed the mathematical equations by backing out the final values from the DCF table.

174. The sale of the PDVH equity is an equity share purchase, not an asset sale. As a result, an acquirer would not recognize the net operating loss carryforward nor benefit from the significant depreciation tax shield that would otherwise reduce the tax burden during the forecast period. Evercore's DCF analysis models the incorrect type of transaction. I have corrected Evercore's DCF model to reflect the transaction ordered by the court, an equity share purchase, while retaining the 23% marginal tax rate assumed by Evercore. Notably, Evercore's valuation does not report the depreciation and amortization values as originally presented in the forecast underlying the valuation. Instead, it only includes adjusted depreciation and amortization values, assuming an asset sale. Therefore, I use the depreciation and amortization values from the company's 2024 MTP (dated October 2023) with taxes correctly calculated.

175. For the terminal value calculation, I apply the \$377 million tax value used by Evercore for the Perpetuity Growth Model. With these corrections, the revised Evercore valuation is \$12,166 million. This corrected valuation provides the proper starting point for evaluating Evercore's model, as it accurately reflects the transaction that is taking place—an equity share purchase, not an asset sale.

²³⁰ I was able to reverse-engineer Evercore's calculations and confirm that 80% of EBIT is untaxed and the remaining 20% of EBIT is taxed at the rate of 23%. *See* Evercore, CITGO Valuation Report, September 14, 2023 ("CITGO Valuation Slides_v2023.09.14.pdf"), p. 7, footnote 3.

2. Evercore's Valuation Assumes an Unrealistically Low Perpetuity Growth Rate

176. When I correct the Evercore valuation, I use a 2.0% perpetuity growth rate. Evercore applies a perpetuity growth rate range of -0.5% to 0.5%, with a midpoint of 0.0%. This midpoint is unreasonably low as it implies zero nominal growth and, consequently, negative volume growth equal to the inflation rate. Indeed, if Evercore assumes that prices increase 2%, a 0.0% nominal growth rate would require a 2% decline in real output volume—an implausibly pessimistic assumption.

177. Evercore's DCF analysis relies on CITGO's adjusted EBITDA forecasts for the period 2023–2028. For the final four years of this period (2024–2028), adjusted EBITDA is projected to grow from \$1,843 million in 2024 to \$2,308 million in 2028, reflecting a compound annual growth rate (CAGR) of 5.8%.²³¹ Therefore, based on Evercore's analysis, CITGO is expected to experience steady EBITDA growth. In this context, assuming a 0% perpetuity growth rate is not only conservative—it is excessively so and inconsistent with the forecasted trajectory.

3. Evercore's Valuation Applies a Larger Discount Rate than its WACC Calculation

178. When I correct the Evercore valuation, I use an 8.40% WACC based on Evercore's own WACC calculations. As previously discussed, Evercore's WACC calculation using the CAPM and a comparable companies analysis, produced a discount rate range of 8.6% and 9.0%.²³² Furthermore, Evercore claimed in its valuation report that it was using a range of "8.5% to 9.0%".²³³ However, in its DCF model, Evercore used WACC values between 9.00% and 9.50%, with its primary calculation at the midpoint of 9.25%.²³⁴

179. Evercore inappropriately applies a small company risk premium equal to 0.6%. Fair market valuation principles dictate that the value of an asset be estimated from the perspective of a typical

²³¹ Id., p. 7.

²³² Id., p. 13.

²³³ Id., p. 5.

²³⁴ Id., p. 7.

market participant. Applying a small company risk premium is inappropriate because the market is not composed exclusively of small companies. Removing the small company risk premium and keeping all other aspects of Evercore's WACC calculation unchanged, Evercore would calculate a WACC in the range from 8.2% – 8.6%.²³⁵ I apply a WACC of 8.40% to correct Evercore's valuation, which is the midpoint of its calculated range.

4. The Incremental Effects of the Updates and Corrections to the Evercore DCF Valuation

180. Evercore made a mistake in the manner it applied the tax rates in its valuation model. Specifically, it assumed that the acquirer would be able to claim a net operating loss equal to 80% of EBIT, thereby paying taxes on only 20% of the EBIT.²³⁶ This assumption was carried through all forecast years, but was inexplicably omitted in the terminal value calculation in the perpetuity growth model.²³⁷ I find this assumption to be unsupported and inappropriate for use in this DCF valuation.

181. Step 0 fixes this mistake. I use Evercore's DCF model for the court-ordered transaction with the 23% marginal tax rate assumed by Evercore. However, Evercore's valuation does not report the depreciation and amortization values from the forecast on which the valuation was based. It only reported the adjusted depreciation and amortization values that assume an asset sale. Therefore, I assume that the appropriate depreciation and amortization values -consistent with proper tax calculations- are those from the company's MTP prepared in October 2023 (just one

²³⁵ Evercore's weighted average cost of capital calculation includes a weight of 25.8% for cost of debt. The equity weight is calculated as one minus the debt weight, resulting in a weight of 74.2% for cost of equity. Reducing the cost of equity by 0.6% by not including the small country risk premium reduces Evercore's calculation of WACC from the range 8.6% – 9.0% to the range 8.2% – 8.6% (subtracting 74.2% * 0.6% from both end points of the range).

²³⁶ I was able to reverse-engineer Evercore's calculations and confirm that 80% of EBIT is untaxed and the remaining 20% of EBIT is taxed at the rate of 23%. *See* Evercore, CITGO Valuation Report, September 14, 2023 ("CITGO Valuation Slides_v2023.09.14.pdf"), p. 7, footnote 3.

²³⁷ As previously discussed, Evercore incorrectly assumes an asset sale. With an asset sale, there is an assumed step-up in basis and a large amount of depreciation resulting in negative earnings in the year of the sale. Evercore assumes that this large net operating loss in the first year is carried over to the following model years, limited to 80% of EBIT. However, the transaction is an equity share purchase and not an asset sale. With an equity share purchase, an acquirer would not recognize this net loss carryforward and would not see the large depreciation tax shield reducing the tax burden.

month after Evercore's valuation). To calculate the terminal value, I use the \$377 million tax figure employed by Evercore in its Perpetuity Growth Model.

182. Step 1 updates the discount rate to the Evercore-calculated discount rate (CAPM). This replaces the discount rate from 9.25% to 8.40%.

183. Step 2 updates the perpetuity growth rate from the 0.0% used by Evercore to a 2.0% perpetuity growth rate with zero real growth. This 2.0% perpetuity growth rate is applied to the terminal value.

184. In **Table 14** below, I offer a summary of the impact of these adjustments on Evercore's original estimate. Starting with Evercore's valuation of \$13,169 million, correctly calculating taxes since this is an equity share purchase and not an asset sale, the valuation decreases to \$12,168 million. In Step 1, the discount rate for the forecast period (2024–2028) is updated to 8.40%, resulting in a \$1,340 million increase in valuation. In Step 2, the perpetuity growth rate increases to 2.0%, and the valuation rises by \$3,399 million. The result is the PDVH enterprise value equal to \$16,907 million.

Table 14. The Incremental Effects of the Updates to Evercore's September 2023 DCF Valuation

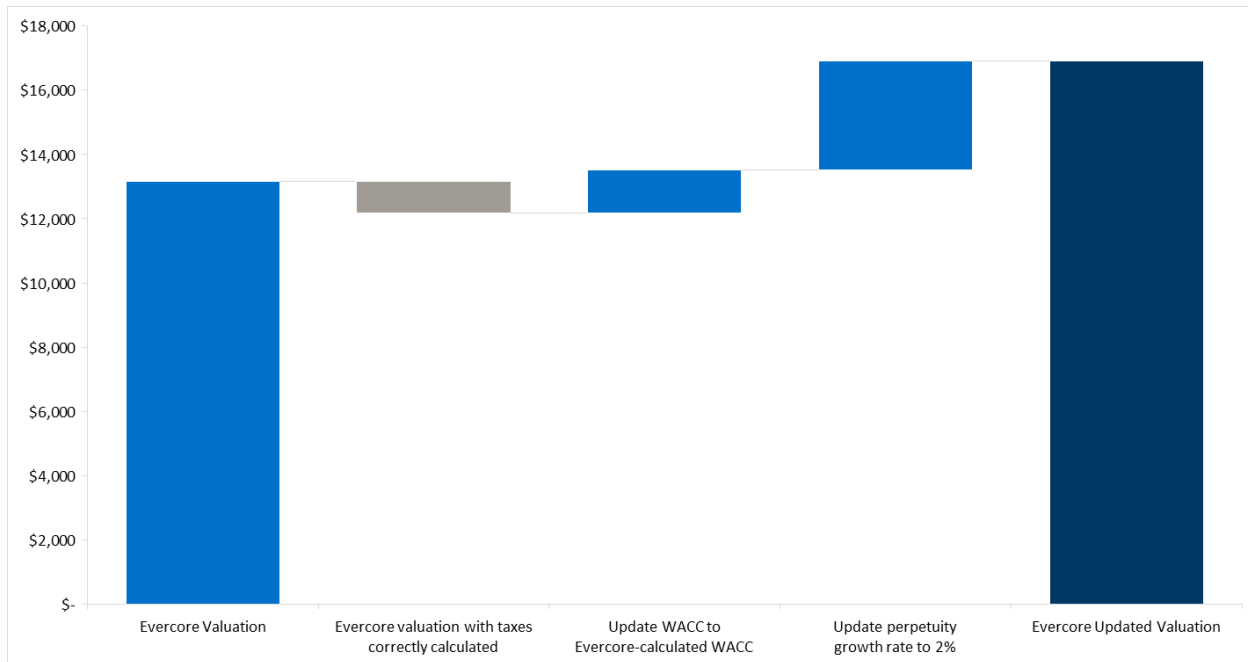
<i>(\$ in millions USD)</i>	Valuation	Incremental Effect
Start: Evercore Valuation	\$ 13,169	
Step 0: Evercore valuation with taxes correctly calculated	12,168	(1,001)
Step 1: Update WACC to Evercore-calculated WACC	13,508	1,340
Step 2: Update perpetuity growth rate to 2%	16,907	3,399
Final: Evercore Updated Valuation	16,907	

Sources: CITGO, Medium Term Plan 2025–2030, January 20, 2025 (“2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf”), pp. 71-72; Evercore, Revised CITGO Financial Projections, January 26, 2025 (“Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx”); Evercore, CITGO Valuation Report, September 14, 2023 (“CITGO Valuation Slides_v2023.09.14.pdf”), p. 7.

185. The updates to Evercore's 2023 DCF model increase the PDVH valuation by \$3,739 million relative to Evercore's reported valuation (with the incorrect taxes) and increase the PDVH valuation by \$4,740 million relative to Evercore's valuation with corrected taxes.

186. The effects as reported in **Table 14** above are illustrated in a waterfall figure in **Figure 16** below.

Figure 16. Waterfall Analysis: The Incremental Effects of the Updates to Evercore’s September 2023 DCF Valuation



Sources: CITGO, Medium Term Plan 2025–2030, January 20, 2025 (“2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf Highly Confidential - Clean Team.pdf”), pp. 71-72; Evercore, Revised CITGO Financial Projections, January 26, 2025 (“Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx”); Evercore, CITGO Valuation Report, September 14, 2023 (“CITGO Valuation Slides_v2023.09.14.pdf”), p. 7.

C. A Market Multiples Approach Values the CITGO Enterprise Value Between \$13.0 Billion and \$18.5 Billion

187. To check the DCF analysis, I conduct a comparable company analysis (also referred to as a Market Multiples approach) to estimate CITGO’s enterprise value (“EV”). The market multiples that I apply in my analysis are the EV-to-EBITDA multiples from the five most comparable companies previously identified. This method estimates CITGO’s value by looking at the market values of similar companies, using specific financial ratios known as valuation multiples. The process begins by identifying a set of comparable companies—ideally businesses in the same industry with similar size, growth prospects, profitability, and capital structure. For each company, the relevant multiples are calculated using current market data. The median of these multiples is then applied to CITGO’s financial metrics to derive an estimate of its enterprise value.

188. For this Market Multiples analysis, I use the same five most comparable companies I used to calculate the WACC: Marathon, Phillips 66, Valero, HF Sinclair, and PBF. For each quarter from 2022:Q1 to 2025:Q1, I obtain each company's multiples for the EV relative to the last twelve months ("LTM") EBITDA.²³⁸ I use LTM EBITDA as the base because it reflects actual performance. The EV in a particular quarter is calculated as the average over that quarter based on the average value of the market capitalization during that quarter. I calculate the median EV-to-EBITDA for each quarter across five companies. I also calculate a range for the five most comparable companies in each quarter, where the lower end of the range is equal to the 25th percentile of the multiples and the upper end of the range is equal to the 75th percentile of the multiples.²³⁹

189. Table 15 below reports the quarterly EV-to-EBITDA multiples.

Table 15. EV/EBITDA Multiples for Comparable Companies used by CITGO in the Ordinary Course

	3 months Q1 Mar-31- 2022	3 months Q2 Jun-30- 2022	3 months Q3 Sep-30- 2022	3 months Q4 Dec-30- 2022	3 months Q1 Mar-31- 2023	3 months Q2 Jun-30- 2023	3 months Q3 Sep-29- 2023	3 months Q4 Dec-29- 2023	3 months Q1 Mar-28- 2024	3 months Q2 Jun-30- 2024	3 months Q3 Sep-30- 2024	3 months Q4 Dec-31- 2024	3 months Q1 Mar-31- 2025
Marathon Petroleum Corporation	8.4x	7.9x	5.1x	3.9x	3.4x	2.8x	3.4x	3.7x	4.5x	5.3x	5.2x	5.7x	6.8x
Phillips 66	11.1x	8.8x	5.6x	5.2x	4.6x	3.9x	4.6x	5.3x	6.4x	7.2x	7.3x	8.4x	10.5x
Valero Energy Corporation	12.2x	9.2x	5.1x	3.8x	3.4x	2.4x	2.9x	2.9x	3.6x	4.5x	4.6x	5.5x	6.8x
HF Sinclair Corporation	7.5x	10.4x	7.1x	4.5x	3.2x	2.3x	3.0x	3.2x	4.0x	4.5x	4.5x	6.6x	7.9x
PBF Energy Inc.	14.6x	10.9x	3.9x	1.9x	1.4x	1.1x	1.6x	1.7x	2.1x	2.8x	2.6x	9.3x	28.8x
Median	11.1x	9.2x	5.1x	3.9x	3.4x	2.4x	3.0x	3.2x	4.0x	4.5x	4.6x	6.6x	7.9x
Lower End of Range (25th perc)	8.2x	8.6x	4.8x	3.3x	2.8x	2.0x	2.6x	2.6x	3.2x	4.0x	4.0x	5.7x	6.8x
Upper End of Range (75th perc)	12.8x	10.5x	6.0x	4.7x	3.7x	3.1x	3.7x	4.1x	5.0x	5.8x	5.7x	8.7x	15.1x

Source: CapIQ.

190. For each quarter, I then multiply the median, the lower end of the range, and the upper end of the range by CITGO's reported LTM EBITDA (since the multiple that I apply is the ratio of a company's EV to its LTM EBITDA, then I must apply CITGO's LTM EBITDA for consistency). For example, CITGO's LTM EBITDA for 2022:Q1 equals the EBITDA for the twelve months in

²³⁸ Data is reported at quarterly frequency. Accounting convention refers to financial values over the past year as Last Twelve Months ("LTM") and not Last Four Quarters or Last Year.

²³⁹ The 25th percentile is defined as $\frac{1}{4}$ of the lowest value and $\frac{3}{4}$ of the second lowest value since the five values are distributed at the 10th, 30th, 50th, 70th, and 90th percentiles. The 25th percentile is calculated as the weighted average of the 10th percentile and the 30th percentile with $\frac{1}{4}$ weight to the 10th percentile and $\frac{3}{4}$ weight to the 30th percentile. Similarly, the 75th percentile is defined as $\frac{1}{4}$ of the highest value and $\frac{3}{4}$ of the second highest value.

the period 2021:Q2–2022:Q1, or \$1,162 million. The CITGO enterprise value, calculated each quarter, is then averaged over all 13 quarters to provide one range and one median.

191. **Table 16** below reports the range of CITGO enterprise values, including a median, based on applying LTM multiples from the five most comparable companies and LTM EBITDA for the period 2022:Q1–2025:Q1.

Table 16. CITGO EV Estimate using Multiples of Comparable Companies

(\$ in millions USD)	3 months Q1 Mar-31- 2022	3 months Q2 Jun-30- 2022	3 months Q3 Sep-30- 2022	3 months Q4 Dec-30- 2022	3 months Q1 Mar-31- 2023	3 months Q2 Jun-30- 2023	3 months Q3 Sep-29- 2023	3 months Q4 Dec-29- 2023	3 months Q1 Mar-28- 2024	3 months Q2 Jun-30- 2024	3 months Q3 Sep-30- 2024	3 months Q4 Dec-31- 2024	3 months Q1 Mar-31- 2025	2022:Q1- 2025:Q1
EBITDA	\$ 1,162	\$ 2,809	\$ 3,413	\$ 4,400	\$ 5,242	\$ 4,023	\$ 4,120	\$ 3,293	\$ 2,642	\$ 2,162	\$ 1,548	\$ 1,154	\$ 533	
Multiples														
Median	11.1x	9.2x	5.1x	3.9x	3.4x	2.4x	3.0x	3.2x	4.0x	4.5x	4.6x	6.6x	7.9x	
Lower End of Range	8.2x	8.6x	4.8x	3.3x	2.8x	2.0x	2.6x	2.6x	3.2x	4.0x	4.0x	5.7x	6.8x	
Upper End of Range	12.8x	10.5x	6.0x	4.7x	3.7x	3.1x	3.7x	4.1x	5.0x	5.8x	5.7x	8.7x	15.1x	
Enterprise Value														
Median														\$12,530
Range														\$10,763 - \$15,258

Sources: CITGO Quarterly Reports; CapIQ

192. The CITGO enterprise value is calculated in the range from \$10,763 million – \$15,258 million, with median of \$12,530 million.

193. Market multiples have historically understated acquisition multiples because sales of 100% controlling interest involve premia relative to values predicted from trading prices. A paradigmatic example is Marathon’s acquisition of Andeavor in 2018 when it paid a 24.4% premium to close the acquisition relative to the market price (meaning that the acquisition multiples were 24.4% larger than the market multiples).²⁴⁰ This sales premium is explained by the fact that the entire company was being purchased. By contrast, publicly traded stock valuations are inherently non-control valuations, because they are the price of a single share.

²⁴⁰ Marathon Petroleum Corporation, “Marathon Petroleum Corp. and Andeavor Combination to Create Leading U.S. Refining, Marketing, and Midstream Company,” April 30, 2018, accessed August 19, 2024, available at <https://ir.marathonpetroleum.com/investor/news-releases/news-details/2018/Marathon-Petroleum-Corp-and-Andeavor-Combination-to-Create-Leading-US-Refining-Marketing-and-Midstream-Company/default.aspx> (“Marathon Petroleum Corp. (NYSE: MPC) and Andeavor (NYSE: ANDV) today announced that they have entered into a definitive merger agreement under which MPC will acquire all of ANDV's outstanding shares, representing a total equity value of \$23.3 billion and total enterprise value of \$35.6 billion, based on MPC's April 27, 2018, closing price of \$81.43. ANDV shareholders will have the option to choose 1.87 shares of MPC stock, or \$152.27 in cash subject to a proration mechanism that will result in 15 percent of ANDV's fully diluted shares receiving cash consideration. This represents a premium of 24.4 percent to ANDV's closing price on April 27, 2018.”).

194. While such a purchase premium cannot be expected in every acquisition, it provides a useful benchmark indicating that valuations based on market multiples tend to understate the value of a company in the context of a full acquisition. When buyers acquire an entire company—or at least a controlling interest—they are typically willing to pay a premium over the price of individual shares or non-controlling stakes. Accordingly, the control value of CITGO must exceed the range and median values derived from the market multiples analysis presented above.

195. **Table 17** below summarizes the purchase price and associated control premiums (measured relative to the stock price at deal close) for seven transactions involving US-based refining companies.

Table 17. Empirical Estimates of the Premium for Control for Recent Full-Company Acquisitions

Year	Closing Date	Company	Acquisition	Purchase Price (in billions USD)	Premium
2005	12/31/2005	Valero Energy	Premcor	\$8.0	20.0%
2009	7/21/2009	Suncor	Petrocanada	\$15.0	25.0%
2016	6/1/2017	Tesoro	Western Refining	\$6.4	22.3%
2017	6/30/2017	Delek US Holdings	Alon USA	\$0.5	6.6%
2018	10/1/2018	Marathon Petroleum	Andeavor	\$35.6	24.4%
2021	1/4/2021	Cenovus Energy	Husky Energy	\$7.8	21.0%
2023	12/1/2023	HF Sinclair	Holly Energy Partners	\$1.4	2.0%
Median					21.0%
Weighted Average					23.0%

Sources: SEC, “Valero to acquire Premcor in \$8 Billion Transaction,” April 25, 2005, accessed June 19, 2025, available at https://www.sec.gov/Archives/edgar/data/1035002/000110465905017931/a05-7234_1ex99d1.htm; Law360, “Suncor To Buy Petro-Canada In \$15B All-Stock Deal,” March 23, 2009, accessed April 17, 2025, available at <https://www.law360.com/articles/92953/suncor-to-buy-petro-canada-in-15b-all-stock-deal>; SEC, “Suncor Energy and Petro-Canada join forces to create the premier Canadian energy company,” March 23, 2009, accessed May 1, 2025, available at https://www.sec.gov/Archives/edgar/data/795615/000079561509000015/exhibit99_1.htm; SEC, “Suncor Energy and Petro-Canada Merger Receives Competition Bureau Approval,” July 21, 2009, accessed June 19, 2025, available at https://www.sec.gov/Archives/edgar/data/311337/000110465909044240/a09-17686_3ex99d1.htm; SEC, “Tesoro to acquire Western Refining in \$6.4 Billion Transaction,” November 17, 2016, accessed April 17, 2025, available at https://www.sec.gov/Archives/edgar/data/1339048/000095010316017970/dp70374_ex9901.htm; SEC, “Tesoro Western Refining, Inc. Acquisition,” June 1, 2017, accessed June 19, 2025, available at <https://www.sec.gov/Archives/edgar/data/50104/000005010417000176/exhibit991wnracquisitionpr.htm>; Reuters, “Refiner Delek to buy rest of Alon USA for \$464 million,” January 3, 2017, accessed April 17, 2025, available at <https://www.reuters.com/article/world/americas/refiner-delek-to-buy-rest-of-alon-usa-for-464-million-idUSKBN14N11V/>; Marathon Petroleum, “Marathon Petroleum Corp. and Andeavor Combination to Create Leading U.S. Refining, Marketing, and Midstream Company,” April 30, 2018, accessed July 7, 2025, available at <https://ir.marathonpetroleum.com/investor/news-releases/news-details/2018/Marathon-Petroleum-Corp-and-Andeavor-Combination-to-Create-Leading-US-Refining-Marketing-and-Midstream-Company/default.aspx>; SEC, “Conversion Notice,” October 1, 2018, accessed June 19, 2025, available at <https://www.sec.gov/Archives/edgar/data/1510295/000151029519000014/mpc-20181231xex1076.htm>; Financial Times, “Cenovus snares Li Ka-shing’s Husky Energy in \$7.8bn deal,” October 25, 2020, accessed June 17, 2025, available at <https://www.ft.com/content/3f567137-0ea4-41e5-93eb-92432f27f4ef>; Hart Energy, “HollyFrontier to Acquire Sinclair Oil Assets in \$2.6 Billion Deal,” August 3, 2021, available at <https://www.hartenergy.com/exclusives/hollyfrontier-acquire-sinclair-oil-assets->

[26-billion-deal-195484](#); SEC, “HF Sinclair Corporation, Schedule 14A Information,” June 8, 2022, accessed June 19, 2025, available at <https://www.sec.gov/Archives/edgar/data/1915657/000119312522117616/d306676ddef14a.htm>; Reuters, “HF Sinclair to buy remaining Holly Energy stake in \$1.44 bln deal,” August 16, 2023, accessed April 28, 2025, available at <https://www.reuters.com/markets/deals/hf-sinclair-buy-remaining-stake-holly-energy-2023-08-16/>; HF Sinclair, “HF Sinclair Corporation and Holly Energy Partners, L.P. Announce Definitive Merger Agreement,” August 16, 2023, accessed June 11, 2025, available at <https://www.hfsinclair.com/investor-relations/press-releases/Press-Release-Details/2023/HF-Sinclair-Corporation-and-Holly-Energy-Partners-L.P.-Announce-Definitive-Merger-Agreement/default.aspx>.

Note: In 2017, Tesoro announced its change of name to Andeavor following its acquisition of Western Refining.

196. **Table 17** illustrates that the control premium (defined as the percentage by which the purchase price exceeds the stock price at deal closing) ranges from 2.0%–25.0%. The median value across the transactions is 21.0%. Weighting by the transaction size, the average premium is 23.0%.

197. I apply a control premium of 21.0%, corresponding to the median from **Table 17**. Incorporating this premium results in an estimated enterprise value for CITGO Petroleum ranging from \$13,023 million to \$18,463 million, with a median of \$15,162 million.

D. A Comparable Full-Company Acquisition Approach Values the CITGO Equity at \$16.2 Billion

198. A second way to validate my DCF analysis is by implementing a comparable full-company acquisition analysis, commonly referred to as “precedent transaction analysis.” This method estimates what a buyer might pay for the target company by analyzing previous acquisitions of similar businesses. The concept is straightforward: if companies with similar characteristics were acquired at certain valuations, those transactions can provide a benchmark for the target’s value. This approach involves identifying transactions where the entire company was sold and examining the terms of those deals—including purchase price, transaction structure, and the companies’ financial performance at the time of sale. Analysts then derive valuation multiples such as Enterprise Value to EBITDA (EV/EBITDA), Enterprise Value to Revenue (EV/Revenue), or Price to Earnings (P/E) ratios from these transactions.

199. Achieving accurate results depends on selecting truly comparable transactions. This involves identifying deals involving companies that operate in the same industry, are similar in size and growth stage, and face comparable market conditions. Transactions completed within the past five to ten years are the most relevant, as they reflect current economic trends and buyer sentiment. Once an appropriate set of comparable transactions is assembled, their valuation

multiples are averaged—or adjusted as necessary—and then applied to the target company’s financial metrics. A key strength of this method is that it is anchored in actual market behavior, reflecting the prices buyers have been willing to pay for similar businesses.

200. CITGO’s primary operations are in the downstream segment of the oil industry. Accordingly, one market-based approach to estimating CITGO’s enterprise value is to benchmark the sale of PDVH’s equity against past acquisitions of comparable downstream oil companies. I apply a series of filters to ensure the selection of only the most relevant transactions. First, I include only full-company acquisitions of downstream oil businesses, excluding purchases of individual refineries. Second, I limit the set to acquisitions completed since 2010 to ensure the data reflects recent market conditions. Third, I exclude acquisitions associated with bankruptcy proceedings. CITGO’s balance sheet is strong, and the forced sale of PDVH’s equity is **not** driven by financial distress. Moreover, fair market value must be determined independently of any “fire sale” context, of which bankruptcy acquisitions are a canonical example. Fourth, I include only arm’s-length transactions, excluding cases where an existing shareholder acquired a controlling interest. Fifth, I only value the refineries in the transactions that are located within the United States, as all three CITGO refineries are US-based.

201. Applying these five criteria, my analysis identifies the four most comparable acquisitions to estimate CITGO’s enterprise value: Marathon’s acquisition of Andeavor (formerly Tesoro Corporation) in October 2018;²⁴¹ Andeavor’s acquisition of Western Refining in June 2017;²⁴²

²⁴¹ Marathon’s purchase of Andeavor was the culmination of a series of acquisitions with Western Refining acquiring Northern Tier Energy LP in June 2016 before being acquired by Tesoro Corporation (later renamed Andeavor) in June 2017. *See* Vic Kolenc, “Western Refining completes \$1.6B Northern Tier Energy acquisition,” *El Paso Times*, June 23, 2016, accessed May 5, 2025, available at <https://www.elpasotimes.com/story/money/business/2016/06/23/el-paso-western-refining-northern-tier-oil-refineries-merger-energy-industry/86310276/>; Vic Kolenc, “Western Refining sold in \$6.4B deal,” *El Paso Times*, November 17, 2016, accessed October 25, 2024, available at <https://www.elpasotimes.com/story/money/business/2016/11/17/el-pasos-western-refining-sold-tesoro/94018956/>.

²⁴² Andeavor acquired Western Refining in 2017, including Western’s 53% ownership stake in Western Refining Logistics (WRL). *See* Western Refining, Annual Report for the fiscal year ended December 31, 2016, March 1, 2017, available at <https://www.sec.gov/Archives/edgar/data/1339048/000133904817000008/wnr12311610k.htm>, p. 4. Andeavor acquired the remaining ownership stake in WRL later in 2017. *See* Reuters, “Andeavor unit to buy Western Refining Logistics for \$1.5 billion,” August 14, 2017, accessed April 28, 2025, available at <https://www.reuters.com/article/world/americas/andeavor-unit-to-buy-western-refining-logistics-for-15-billion-idUSKCN1AU128/>.

HollyFrontier's acquisition of Sinclair Oil in March 2022;²⁴³ and Cenovus Energy's acquisition of Husky Energy in January 2021.²⁴⁴ Among these, the Andeavor transaction is the most comparable to the CITGO sale due to its larger scale: Andeavor owned ten refineries, whereas Western Refining owned three, Sinclair Oil owned two, and Husky owned three in the US.²⁴⁵

202. I compile data from public sources on these transactions, including the (implied) enterprise value of the acquisition and both the crude capacity and the NCI of each refinery. **Table 18** below shows the crude capacity and NCI for each refinery currently owned by CITGO, each refinery owned by Andeavor at the time of its October 2018 acquisition, each refinery owned by Western Refining at the time of its June 2017 acquisition, each refinery owned by Sinclair Oil at the time of its March 2022 acquisition, and each US refinery owned by Husky at the time of its January 2021 acquisition.

203. **Table 18** also reports the Equivalent Distillation Capacity ("EDC"), which is defined as the product of the crude capacity and the NCI.

²⁴³ Holly Frontier acquired Sinclair Oil and changed its corporate name to HF Sinclair. Holly Frontier (and thus HF Sinclair) had a partial ownership stake in a subsidiary called Holly Energy that acquired the pipeline and terminal assets of Sinclair Oil. HF Sinclair subsequently (one year later in 2023) acquired the remaining ownership stake in Holly Energy. See HF Sinclair, "HollyFrontier and Holly Energy Partners Announce Completion of Transactions with The Sinclair Companies and Establishment of New Parent Company, HF Sinclair Corporation," March 14, 2022, accessed July 7, 2025, available at <https://www.hfsinclair.com/investor-relations/press-releases/Press-Release-Details/2022/HollyFrontier-and-Holly-Energy-Partners-Announce-Completion-of-Transactions-with-The-Sinclair-Companies-and-Establishment-of-New-Parent-Company-HF-Sinclair-Corporation/default.aspx>.

²⁴⁴ Cenovus announced the acquisition of Husky in October 2020 and the deal closed in January 2021. See Cenovus, "Cenovus and Husky Combine to Create a Resilient Integrated Energy Leader," October 25, 2020, accessed June 25, 2025, available at <https://www.cenovus.com/News-and-Stories/News-releases/2020/2113978>; Cenovus, "Cenovus closes transaction to combine with Husky," January 4, 2021, accessed June 25, 2025, available at <https://www.cenovus.com/News-and-Stories/News-releases/2021/2152436>. The acquisition included three US refineries that I consider in my analysis and one Asphalt refinery in Canada that I do not consider in my analysis. From the company's financial statements, "The Asphalt Refinery processes heavy crude oil and bitumen into asphalt products used in road construction and maintenance. The refinery has a throughput capacity of 30,000 bbls/day of heavy crude oil and bitumen." See Husky, Annual Report for the fiscal year ended December 31, 2019, February 26, 2020, available at <https://lexamples.com/exhibits/contents/MjM5NzkyNQ==>, p. 15.

²⁴⁵ The measure of comparability is in terms of capacity, and although CITGO only owns three refineries, the crude capacity and the Equivalent Distillation Capacity of CITGO's three refineries is most comparable to the ten Andeavor refineries.

Table 18. Characteristics of Refineries Owned by CITGO, Andeavor, Western, Sinclair, and Husky

Refinery Location	PADD	Crude Capacity (thous. bpd)	Nelson Complexity Index	Equivalent Distillation Capacity (thous. bpd)
CITGO Refineries (current)				
Lake Charles, LA	3	418	13.25	5,539
Lemont, IL	2	179	10.99	1,967
Corpus Christi, TX	3	157	17.15	2,693
Total		754	13.53	10,198
Andeavor Refineries (circa October 2018)				
Los Angeles, CA	5	380	13.61	5,172
Martinez, CA	5	166	13.63	2,263
Anacortes, WA	5	120	10.98	1,318
Kenai, AK	5	72	6.36	458
El Paso, TX	3	135	8.80	1,188
St. Paul Park, MN	2	102	11.06	1,128
Mandan, ND	2	74	7.74	573
Salt Lake City, UT	4	63	7.63	481
Gallup, NM	3	25	9.90	248
Dickinson, ND	2	20	1.00	20
Total		1157	11.10	12,847
Western Refineries (circa June 2017)				
El Paso, TX	3	135	8.80	1,188
St. Paul Park, MN	2	102	11.06	1,128
Gallup, NM	3	25	9.90	248
Total		262	9.78	2,564
Sinclair Oil Refineries (circa March 2022)				
Parco (Sinclair, WY)	4	94	9.75	917
Casper, WY	4	30	7.36	221
Total		124	9.17	1,137
Husky US Refineries (circa January 2021)				
Lima, OH	2	175	8.50	1,488
Toledo, OH	2	160	11.60	1,856
Superior, WI	2	50	8.90	445
Total		385	9.84	3,789

Sources: S&P Platts; Andeavor, Annual Report for the fiscal year ended December 31, 2017, February 21, 2018, available at <https://www.sec.gov/Archives/edgar/data/50104/000005010418000054/andv201710-k.htm>, p. 13; GlobalData, “Refinery profile: Carson coking refinery, US,” Offshore Technology, accessed June 19, 2025, available at <https://www.offshore-technology.com/marketdata/carson-refinery-coking-the-us/>; GlobalData, “Refinery profile: Anacortes cracking refinery, US,” Offshore Technology, accessed June 19, 2025, available at <https://www.offshore-technology.com/marketdata/anacortes-refinery->

[cracking-the-us/](#); GlobalData, “Refinery profile: Kenai cracking refinery, US,” Offshore Technology, accessed June 19, 2025, available at <https://www.offshore-technology.com/marketdata/kenai-refinery-cracking-the-us/>; GlobalData, “Refinery profile: El Paso cracking refinery, US,” Offshore Technology, accessed August 19, 2024, available at <https://www.offshore-technology.com/marketdata/el-paso-refinery-cracking-the-us/>; GlobalData, “Refinery profile: Saint Paul Park cracking refinery, US,” Offshore Technology, accessed June 19, 2025, available at <https://www.offshore-technology.com/marketdata/saint-paul-park-refinery-cracking-the-us/>; GlobalData, “Refinery profile: Mandan cracking refinery, US,” Offshore Technology, accessed August 19, 2024, available at <https://www.offshore-technology.com/marketdata/mandan-refinery-cracking-the-us/>; GlobalData, “Refinery profile: Salt Lake City I cracking refinery, US,” Offshore Technology, accessed June 19, 2025, available at <https://www.offshore-technology.com/marketdata/salt-lake-city-i-refinery-cracking-the-us/>; A Barrel Full, “Gallup Refinery,” accessed August 19, 2024, available at <http://abarrelfull.wikidot.com/gallup-refinery>; The United States of America, The State of Alaska, The State of Hawaii, and The Northwest Clean Air Agency v. Tesoro Refining & Marketing Company LLC, Tesoro Alaska Company LLC, Tesoro Logistics L.P., and Par Hawaii Refining, LLC, Case No. SA-16-cv-00722 (W.D. Tex.), Consent Decree July 18, 2016, Appendix 2.4; GlobalData, “Refinery profile: Sinclair coking refinery, US,” Offshore Technology, accessed June 19, 2025, available at <https://www.offshore-technology.com/marketdata/sinclair-refinery-coking-the-us/>; Husky Energy Inc., Annual Report for the fiscal year ended December 31, 2019, February 26, 2020, available at <https://lexamples.com/exhibits/contents/MjM5NzkyNQ==>, p. 58 (“Segmented Financial Information – Reclassified”); SEC, “Valero to acquire Premcor in \$8 Billion Transaction,” April 25, 2005, accessed April 17, 2025, available at https://www.sec.gov/Archives/edgar/data/1035002/000110465905017931/a05-7234_1ex99d1.htm; Green Car Congress, “BP Moves Into Canadian Oil Sands with Husky Energy; Major Upgrade Planned at US Refinery,” December 8, 2007, available at <https://www.greencarcongress.com/2007/12/bp-moves-into-c.html>; A Barrel Full, “Superior Refinery,” accessed June 19, 2025, available at <http://abarrelfull.wikidot.com/superior-refinery>.

Note: Husky had a 50% ownership stake in the refinery in Toledo, OH (BP had the other 50% stake).

204. The enterprise value associated with the Andeavor acquisition was \$35.6 billion.²⁴⁶ The value of the Andeavor refineries is isolated by applying the Andeavor share of total EBITDA from the “Refining” segment for the years 2015–2017, the final three years before the acquisition by Marathon in 2018.²⁴⁷ I calculate the refining share of EBITDA in each of the three years and then take the average. The refinery share for Andeavor equals 49.18%.²⁴⁸ Thus, the Andeavor refineries are valued at \$17.5 billion.²⁴⁹

²⁴⁶ Marathon Petroleum, “Marathon Petroleum Corp. and Andeavor Combination to Create Leading U.S. Refining, Marketing, and Midstream Company,” April 30 2018, accessed July 7, 2025, available at <https://ir.marathonpetroleum.com/investor/news-releases/news-details/2018/Marathon-Petroleum-Corp-and-Andeavor-Combination-to-Create-Leading-US-Refining-Marketing-and-Midstream-Company/default.aspx>.

²⁴⁷ Andeavor, Annual Report for the fiscal year ended December 31, 2017, February 21, 2018, available at <https://www.sec.gov/Archives/edgar/data/50104/000005010418000054/andv201710-k.htm>, pp. 40-48. The refining share is the share of EBITDA from the “Refining” segment relative to the total EBITDA across the segments “Refining,” “Marketing,” and “Logistics.”

²⁴⁸ See Table 19.

²⁴⁹ (\$35.6 billion) * (49.18%) = \$17.5 billion.

205. The enterprise value associated with the Western Refining acquisition was \$6.4 billion.²⁵⁰ The value of the Western refineries is isolated by applying the Western share of total EBITDA from the “Refining” segment for 2016, the final year before the acquisition by Andeavor in 2017.²⁵¹ The refinery share for Western equals 76.33%.²⁵² Thus, the Western refinery value equals \$4.9 billion.²⁵³

206. The enterprise value associated with the Sinclair Oil acquisition was \$2.6 billion.²⁵⁴ The acquisition of Sinclair Oil was split between Holly Frontier (which created HF Sinclair) and Holly Energy, where Holly Frontier acquired the refining and marketing assets and Holly Energy acquired the pipeline and terminal storage assets.²⁵⁵ The Holly Energy acquisition of pipelines and terminals was valued at \$758 million.²⁵⁶ Thus, the acquisition that involved refinery assets was the \$1.8 billion acquisition by Holly Frontier.²⁵⁷ The value of the Sinclair Oil refineries within the Holly Frontier acquisition is isolated by applying the refinery share. HF Sinclair reported that its contribution to net income was \$865.1 million in 2022.²⁵⁸ HF Sinclair further stated that “operations of the Acquired Sinclair Businesses are reported in the Refining, Renewables,

²⁵⁰ Vic Kolenc, “Western Refining sold in \$6.4B deal,” El Paso Times, November 18, 2016, accessed October 25, 2024, available at <https://www.elpasotimes.com/story/money/business/2016/11/17/el-pasos-western-refining-sold-tesoro/94018956/>. The deal had an equity value of \$4.1 billion, and included Andeavor “assuming \$1.7 billion in Western debt, and getting Western’s \$605 million ownership stake in its sister company, Western Refining Logistics.” Ibid.

²⁵¹ Western Refining, Annual Report for the fiscal year ended December 31, 2016, March 1, 2017, available at <https://www.sec.gov/Archives/edgar/data/1339048/000133904817000008/wnr12311610k.htm>, pp. 48, 54, 57. EBITDA was calculated as the sum of operating income and depreciation and amortization. The refining share is the share of EBITDA from the “Refining” segment relative to the total EBITDA across the segments “Refining,” (p. 48), “Logistics,” (p. 54) and “Retail.” (p. 57)

²⁵² See Table 19.

²⁵³ (\$6.4 billion) * (76.33%) = \$4.9 billion.

²⁵⁴ Hart Energy, “HollyFrontier to Acquire Sinclair Oil Assets in \$2.6 Billion Deal,” August 3, 2021, accessed April 28, 2025, available at <https://www.hartenergy.com/exclusives/hollyfrontier-acquire-sinclair-oil-assets-26-billion-deal-195484>.

²⁵⁵ Ibid.

²⁵⁶ Ibid.

²⁵⁷ (\$2.6 billion) – (\$758 million) = \$1.8 billion.

²⁵⁸ HF Sinclair, Annual Report for the fiscal year ended December 31, 2022, February 28, 2023, available at https://s29.q4cdn.com/382181944/files/doc_financials/2022/ar/HF-Sinclair-2022-Annual-Report.pdf, p. 95. The acquisition was effective March 14, 2022.

Marketing and HEP segments.”²⁵⁹ Holly Frontier did not have a Marketing segment before it acquired Sinclair Oil, so all Marketing net income will be attributable to Sinclair Oil. I have already separated the Sinclair Oil acquisition by Holly Frontier (refineries and marketing) from the Sinclair Oil acquisition by Holly Energy (pipelines and terminals), so net income to HEP (Holly Energy Partners) will not be considered. The Renewables segment for HF Sinclair represented a net income loss for the company in 2022, and any renewable assets contributed by Sinclair Oil appeared to have been minimal. Thus, net income from Renewables is not considered. Thus, the net income for Sinclair Oil (the part of Sinclair Oil acquired by Holly Frontier) consists of net income from the Refining and Marketing segments. Total net income equals \$865.1 million and marketing net income equals \$45.524 million, which implies that refining net income equals \$819.576 million, or 94.74% of total net income.²⁶⁰ Thus, the Sinclair Oil refinery value equals \$1.7 billion.²⁶¹

207. The enterprise value associated with the Husky acquisition was \$10.2 billion in CAD.²⁶² The exchange rate at the time of the announcement was 1.3147 CAD per USD.²⁶³ Thus, the enterprise value in USD was \$7.8 billion. Husky financial statements from 2018 and 2019 (prior to the acquisition) report the operating income and depreciation and amortization for each of its business segments.²⁶⁴ I calculate EBITDA as operating income plus depreciation and amortization for each of the five Husky business segments: Lloyd Heavy Oil Value Chain, Oil Sands, Western

²⁵⁹ Id., p. 128 (“As a result of the Sinclair Transactions that closed on March 14, 2022, the operations of the Acquired Sinclair Businesses are reported in the Refining, Renewables, Marketing and HEP segments.”).

²⁶⁰ $(\$819.6 \text{ million}) \div (\$865.1 \text{ million}) = 94.74\%$; Id., p. 129.

²⁶¹ $(\$1.8 \text{ billion}) * (94.74\%) = \1.7 billion .

²⁶² Venus Fang, “Canada’s Cenovus Energy to buy Husky Energy in all-stock sale,” World Oil, October 26, 2020, accessed May 14, 2025, available at <https://worldoil.com/news/2020/10/26/canada-s-cenovus-energy-to-buy-husky-energy-in-all-stock-sale/>.

²⁶³ $(\$10.2 \text{ billion}) \div (1.3147) = \7.8 billion ; Ann Maria Shibu and Rod Nickel, “Canada’s Cenovus to buy Husky for \$2.9 billion as pandemic drives oil mergers,” Reuters, October 25, 2020, accessed June 26, 2025, available at <https://www.reuters.com/article/business/canadas-cenovus-to-buy-husky-for-29-billion-as-pandemic-drives-oil-mergers-idUSKBN27A0EX/>; Google Finance, “United States Dollar to Canadian Dollar on October 25, 2020,” accessed June 30, 2025, available at <https://www.google.com/finance/quote/USD-CAD>.

²⁶⁴ Husky Energy Inc., Annual Report for the fiscal year ended December 31, 2019, February 26, 2020, available at <https://examples.com/exhibits/contents/MjM5NzkyNQ==>, p. 58 (“Segmented Financial Information – Reclassified”).

Canada Production, US Refining, and Canadian Refined Products.²⁶⁵ The share of US Refining EBITDA relative to the total EBITDA summed across the five business segments was 34.68% in 2019 and 28.37% in 2018. I take the average of 31.53% as the share of the enterprise value for the US refineries.²⁶⁶ I apply this percentage to the total enterprise value of \$7.8 billion USD and calculate the Husky US refinery value to be \$2.4 billion.²⁶⁷

208. I use a multiples approach based on the total Equivalent Distillation Capacity (EDC) of all US refineries owned by Andeavor, Western, Sinclair Oil, and Husky at the time of acquisition. The Andeavor refinery value is \$17,508 million and the Andeavor total EDC is 12.847 million barrels per day (measured in complexity-adjusted barrels per day). The EDC Multiple is defined as the ratio of the refinery acquisition value and the total EDC, or \$1,363 per unit of EDC (measured in complexity-adjusted barrels per day) for Andeavor. The Western refinery value is \$4,885 million and the Western total EDC is 2.564 million barrels per day (measured in complexity-adjusted barrels per day). The EDC Multiple for Western Refining equals \$1,906 per unit of EDC (measured in complexity-adjusted barrels per day). The Sinclair Oil refinery value is \$1,745 million and the Sinclair Oil total EDC is 1.137 million barrels per day (measured in complexity-adjusted barrels per day). The EDC Multiple for Sinclair Oil equals \$1,534 per unit of EDC (measured in complexity-adjusted barrels per day). The Husky US refinery value is \$2,446 million and the Husky total EDC (Husky only had a 50% ownership stake in the Toledo, OH refinery) was 2.861 million barrels per day (measured in complexity-adjusted barrels per day). The EDC Multiple for Husky equals \$855 per unit of EDC (measured in complexity-adjusted barrels per day).

209. **Table 19** below contains the calculations of the EDC Multiples for the Andeavor, Western, Sinclair Oil, and Husky acquisitions.

²⁶⁵ Ibid.

²⁶⁶ $(34.7\% + 28.4\%) \div 2 = 31.53\%$

²⁶⁷ $(\$7.8 \text{ billion}) * (31.53\%) = \$2.4 \text{ billion}.$

Table 19. CITGO Enterprise Value from Acquisition EDC Multiples

Andeavor Benchmark	(\$ in millions USD)	
Andeavor Acquisition Enterprise Value	\$	35,600
Andeavor Refinery Value Share		49.18%
Andeavor Refinery Value	\$	17,508
Andeavor EDC (<i>thous. barrels per day</i>)		12,847

Western Refining Benchmark		
Western Refining Acquisition Enterprise Value	\$	6,400
Western Refinery Value Share		76.33%
Western Refinery Value	\$	4,885
Western EDC (<i>thous. barrels per day</i>)		2,564

Sinclair Oil Benchmark		
Sinclair Oil Enterprise Value	\$	2,600
Sinclair Oil to Holly Energy (Pipeline and Storage)	\$	758
Sinclair Oil to HF Sinclair (Refineries)	\$	1,842
Sinclair Oil (to HF Sinclair) Refinery Value Share		94.74%
Sinclair Oil (to HF Sinclair) Refinery Value	\$	1,745
Sinclair Oil EDC (<i>thous. barrels per day</i>)		1,137

Husky Benchmark		
Husky Enterprise Value (CAD)	\$	10,200
Exchange Rate (CAD-to-USD)		1.3147
Husky Enterprise Value (USD)	\$	7,758
Husky US Refinery Value Share		31.53%
Husky Refinery Value	\$	2,446
Husky EDC (<i>thous. barrels per day</i>)		2,861

		May-25	
EDC Multiples for Refinery Value (\$ per barrel per day)	Nominal	Date	Adjusted
Andeavor	\$ 1,363	Oct-18	\$ 1,338
Western Refining	\$ 1,906	Jun-17	\$ 2,736
Sinclair Oil	\$ 1,534	Mar-22	\$ 998
Husky	\$ 855	Jan-21	\$ 1,140
Median			\$ 1,239

CITGO Valuation		
CITGO EDC (<i>thous. barrels per day</i>)		10,198
CITGO Refinery Value	\$	12,638
CITGO Refinery Share of Enterprise Value		78.08%
CITGO Enterprise Value	\$	16,186

Sources: Marathon Petroleum, “Marathon Petroleum Corp. and Andeavor Combination to Create Leading U.S. Refining, Marketing, and Midstream Company,” April 30, 2018, accessed July 7, 2025, available at <https://ir.marathonpetroleum.com/investor/news-releases/news-details/2018/Marathon-Petroleum-Corp-and-Andeavor-Combination-to-Create-Leading-US-Refining-Marketing-and-Midstream-Company/default.aspx>; Vic Kolenc, “Western Refining sold in \$6.4B deal,” El Paso Times, November 18, 2016, accessed October 25, 2024, available at <https://www.elpasotimes.com/story/money/business/2016/11/17/el-pasos-western-refining-sold-tesoro/94018956/>; Hart Energy, “HollyFrontier to Acquire Sinclair Oil Assets in \$2.6 Billion Deal,” August 3, 2024, accessed October 8, 2024, available at <https://www.hartenergy.com/exclusives/hollyfrontier-acquire-sinclair-oil-assets-26-billion-deal-195484>; Ann Maria Shibu and Rod Nickel, “Canada’s Cenovus to buy Husky for \$2.9 billion as pandemic drives oil mergers,” Reuters, October 25, 2020, accessed June 26, 2025, available at <https://www.reuters.com/article/business/canadas-cenovus-to-buy-husky-for-29-billion-as-pandemic-drives-oil-mergers-idUSKBN27A0EX/>; Google Finance, “United States Dollar to Canadian Dollar on October 25, 2020,” accessed June 30, 2025, available at <https://www.google.com/finance/quote/USD-CAD>; Venus Fang, “Canada’s Cenovus Energy to buy Husky Energy in all-stock sale,” World Oil, October 26, 2020, accessed May 14, 2025, available at <https://worldoil.com/news/2020/10/26/canada-s-cenovus-energy-to-buy-husky-energy-in-all-stock-sale/>; Jordan Blum and Dania Saadi, “Cenovus-Husky merger to create Canada’s third-largest oil and gas producer,” S&P Global, October 25, 2020, available at <https://www.spglobal.com/commodity-insights/en/news-research/latest-news/coal/102520-cenovus-energy-husky-merger-to-create-canadas-3rd-largest-oilgas-producer>; U.S. Bureau of Labor Statistics, Producer Price Index by Industry: Petroleum Refineries [PCU324110324110], retrieved from FRED, Federal Reserve Bank of St. Louis, June 24, 2025, available at <https://fred.stlouisfed.org/series/PCU324110324110>.

Notes: Andeavor refinery value share is the average share of Andeavor’s refining EBITDA relative to the total EBITDA of the “Refining,” “Marketing,” and “Logistics” segments from 2015–2017. Western refinery value share is the average share of Western’s refining EBITDA relative to total EBITDA of “Refining,” “Logistics,” and “Retail” segments from 2016. Sinclair Oil refinery value share is the fraction of the operating income recognized by HF Sinclair from the Sinclair Oil acquisition in 2022 (where the non-refinery operating income from Sinclair Oil is from the “Marketing” segment). Husky US refinery value share is the average share of 2018 and 2019 US refinery EBITDA relative to sum of the EBITDAs for the Lloyd Heavy Oil Value Chain, Oil Sands, Western Canada Production, US Refining, and Canadian Refined Products segments. Husky had a 50% ownership stake in the refinery in Toledo, OH (BP owned the other 50%).

210. The acquisitions occurred at different dates. I adjust the nominal values from the date of the close of each acquisition using the Industry PPI index for Petroleum Refineries.²⁶⁸ The Andeavor acquisition closed in October 2018, the Western Refining acquisition closed in June 2017, the Sinclair Oil acquisition closed in March 2022, and the Husky acquisition closed in January 2021. The adjusted EDC Multiples are equal to \$1,338 per unit of EDC for the Andeavor acquisition, \$2,736 per unit of EDC for the Western Refining acquisition, \$998 per unit of EDC for the Sinclair Oil acquisition, and \$1,140 per unit of EDC for the Husky acquisition, all values represented in May 2025 dollar per unit of EDC (measured in complexity-adjusted barrels per day).

211. I calculate the median of the adjusted EDC Multiples from the four benchmarks, which equals \$1,239 per unit of EDC (measured in complexity-adjusted barrels per day). CITGO’s EDC

²⁶⁸ U.S. Bureau of Labor Statistics, Producer Price Index by Industry: Petroleum Refineries [PCU324110324110], retrieved from FRED, Federal Reserve Bank of St. Louis, June 24, 2025, available at <https://fred.stlouisfed.org/series/PCU324110324110>.

for its three refineries equals 10.198 million complexity-adjusted barrels per day. I multiply the adjusted EDC Multiple from the benchmarks by CITGO's EDC to estimate the CITGO refinery value, or \$12,638 million. CITGO's refinery share is calculated as the net present value of CITGO's forecasted EBITDA from refining relative to CITGO's total forecasted EBITDA. As estimated in the DCF model previously described, CITGO's refinery share is 78.08%. This implies that the CITGO refinery value of \$12,638 million equals an enterprise value of \$16,186 million (for all CITGO assets, including refining assets and non-refining assets).

E. Among the Different Valuation Methods, the DCF Valuation is the Most Reliable

212. The DCF model is my primary method. The PDVH enterprise value calculated from the DCF method equals \$18.6 billion. I provide the results of my market multiples analysis and comparable transactions analysis only as corroborative support of my primary method. The DCF method measures value based on the present value of PDVH's future cash flows, which can be reliably estimated as described above. The market multiples method is less reliable because there are only eight publicly-traded refiners and none is fully comparable to CITGO. The comparable transactions method is less reliable because there have been no significant transactions in the refining industry in the last several years and the last transaction of a scale comparable to CITGO (Marathon-Andeavor) was in October 2018, nearly seven years ago. Therefore, while I conduct the market multiples and comparable transactions analyses as a check on my DCF valuation, I only weight the DCF valuation in reaching my final fair market value opinion.

VIII. The PDVH Equity Value Equals \$18.6 Billion

213. I have been asked to determine the fair market value of PDVH equity. In doing so, I make no deduction for the alter ego claims that certain creditors of PDVSA and the Bolivarian Republic of Venezuela have asserted against PDVH. Those claims represent a litigation risk created by the forced sale process and bear no relation to the economic performance or inherent risk profile of the underlying assets. Consequently, I exclude any financial effect of this contingent liability from my valuation. As an economist, I offer no opinion on the likely outcome of the litigation; I merely

observe that the claims arise because lower-priority creditors are seeking to improve their chances of recovery. Because the FMV should capture the value of the business itself, separate from dispute-specific factors, I do not treat the alter ego claims as part of PDVH's fair market value.

214. I do not deduct any amount for the contingent liability associated with the 2020 bonds, which PDVSA issued and purportedly secured with a pledge of 50.1% of CITGO Holding equity.

215. The 2020 bonds have attracted significant attention in both the litigation and the sale process, and a separate action is pending to determine whether the bond issuance was valid. As an economist, I offer no opinion on the outcome of that litigation, on any future payments to the bondholders, or on whether the auction winner will bear responsibility for such payments. I consider it appropriate not to deduct any value associated with the 2020 bonds when determining the equity value of PDVH for two reasons.

216. First, the 2020 bonds constitute a debt of PDVSA, and not PDVH. As such, they are not liabilities of the entity whose equity is being valued.

217. Second, while the holders of the 2020 bonds assert that they possess a lien on the equity of CITGO Holding, this claim remains the subject of ongoing litigation. The legal validity, scope, and enforceability of that lien are far from resolved. In general, valuation experts do not deduct unquantified and unresolved litigation contingencies when estimating equity value, particularly when the underlying obligation is both contested and not attributable to the company being valued. The existence and enforcement of the lien are not intrinsic to the market value of the underlying assets. It is common for businesses to face contingent liabilities and risks that are not reflected on their balance sheets. It is neither standard practice nor analytically appropriate for a valuation expert to attempt to quantify and deduct each such contingency. I do not subtract any value associated with the 2020 bonds when calculating PDVH's equity value.

218. The enterprise value for PDVH is calculated using the DCF method and equals \$18.6 billion. To calculate PDVH's equity value, I add cash net of debt to the enterprise value. PDVH holds \$1,817 million in cash and \$1,847 million of long-term debt on its balance sheet.²⁶⁹

²⁶⁹ PDV Holding, Inc., Report for the Quarterly Period Ended March 31, 2025, May 7, 2025, pp. 6, 28. PDVH long-term debt includes the following items on the company's balance sheet: "Long-Term Debt" equal to \$1,797,289 thousand and "Current portion of long-term debt" equal to \$50,000 thousand.

Therefore, PDVH equity value is the sum of the enterprise value and cash net of debt, equal to \$18.6 billion. See **Table 20** below.

Table 20. PDVH Equity Value

PDVH Enterprise Value	\$	18,620
PDVH Cash on Balance Sheet		1,817
PDVH Long-Term Debt on Balance Sheet		
Long-Term Debt		1,797
Current portion of long-term debt		50
Total Long-Term Debt		1,847
PDVH Equity Value		18,590

Source: PDV Holdings, Inc., Report for the Quarterly Period Ended March 31, 2025, May 7, 2025, pp. 6, 28.

Notes: In April 2025, CITGO redeemed \$50 million of its tax-exempt bonds (totaling \$105 million) with cash on hand. The transaction decreases both cash and long-term debt, with no effect on the equity value. *See* PDV Holdings, Inc., Report for the Quarterly Period Ended March 31, 2025, May 7, 2025, p. 6.

IX. Conclusions

219. The enterprise value of PDVH is \$18.6 billion and the PDVH equity value is \$18.6 billion.

I declare that the foregoing is true and correct.



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X. Appendix A: José Alberro CV



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Dr. Alberro serves as the Head of International Arbitration for Latin America and holds the position of Senior Managing Director at FTI Consulting. He has 30 years of experience providing economic and financial analysis of market dynamics, particularly in oil, natural gas, and petrochemicals. His expertise focuses on economic and financial modeling, valuation, and estimation of damages across a variety of industries. He has been retained by several oil and gas supermajors. He has valued multi-billion upstream oil and gas assets for one of the three largest integrated energy companies in the United States.

Dr. Alberro has worked on oil and natural gas issues in the United States, Mexico, and Latin America for 30 years. He was the CEO of PEMEX Gas, the Mexican government-owned gas and gas-liquids company with 13,000 employees and sales of \$10 billion responsible for the processing, transportation, and marketing of natural gas. In that capacity, he was a Board member of PEMEX Refining, which owned six refineries capable of refining 1.5 million barrels a day.

Dr. Alberro has acted as both an arbitrator (ICSID, ICC, and AAA) and a testifying damages expert in high-stakes international arbitrations involving both investor-state and commercial disputes. He has testified in English, Spanish, and French in almost twenty proceedings in cases related to investments in four continents in oil and gas assets, mining, electricity, construction, port operations, banks, and beverages.

Dr. Alberro had a distinguished career in the Mexican government in the Secretary of the Treasury, the Secretary of Programming and the Budget and the Secretary of Commerce and Industrial Promotion. He was PEMEX's chief representative during the 1990-1992 North American Free Trade Agreement negotiations. The President of Mexico appointed him CEO of PEMEX Gas. He has been a consultant for almost 30 years.

Who's Who Legal referred to Dr. Alberro as one of the world's leading thought leaders and expert witnesses. It named him one of the "foremost legal practitioners in business law based upon comprehensive, independent research" and considered that he has "a very strong reputation" and, in 2017, a Thought Leader. In 2019, Who's Who Legal included him among the Thought Leaders Global Elite and in 2020, he was recognized as an Exceptional Expert by Power Players: International Arbitration.

Dr. Alberro holds a Ph.D. in Economics from the University of Chicago. He was a tenured full Professor at the age of 33 and taught in the graduate economics department of universities in the US, the UK and Mexico for 15 years. He has published extensively in academic journals; one of his papers was cited in the 1995 Nobel Prize in Economics Lecture. He is a member of the Mexican Academy of Science.

Dr. Alberro has published in Oil, Gas & Energy Law Intelligence, the Journal of International Arbitration, The Journal of Damages in International Arbitration; the International Arbitration Law Review; the ICSID Review - Foreign Investment Law Journal; and the International Commercial Arbitration Review.

Dr. Alberro was a United Nations official and has consulted for the IMF, the World Bank, the United Nations Development Program, and the Economic Commission for Latin America and the Caribbean.

Dr. Alberro is a French and Spanish native speaker.

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- **ICC No. 27522/PDP**: GS 1975, LLC, v. DESARROLLADORA LA RIBERA, S. DE R.L. DE C.V.
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- **ICSID, ARB/11/28:** TULIP REAL ESTATE AND DEVELOPMENT NETHERLANDS B.V. v. Republic of Turkey.
- **ICSID ARB/07/30:** CONOCO PHILLIPS Co. and OTHERS v. Bolivarian Republic of Venezuela.
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- **ICDR/AAA:** International Commercial Arbitration between an Italian Sparkling wine manufacturer and its American distributor.
- **UNITED STATES FEDERAL COURT:** Odette Blanco de Fernandez née Blanco Rosell et al v Seaboard Marine Ltd.
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- **IN THE COURT OF CHANCERY OF THE STATE OF DELAWARE,** Lacey v. Germán Larrea Mota-Velasco, et al., C.A. No. 11779-VCG.
- **LCIA:** WWM Logistics LLC v CFE International LLC and Comisión Federal de Electricidad.
- **ICC:** Cooperativa Muratori & Cementisti – C.M.C. di Ravenna Societa Cooperativa (Italy); Itinera S.p.A (Italy); CMC di Ravenna – Itinera JV S.C.p.A (Italy) v. Kerio Valley Development Authority (Kenya).
- **ICSID, ARB(AF)/12/4:** Telefónica S.A. v. United Mexican States
- **ICDR/AAA:** Assess the economic harm resulting from breach of contract of a grain terminal in Odessa, Ukraine.
- **Valuation of potash deposits** in an eastern European country.
- **UNCITRAL:** Food Importer and distributor v the Bolivarian Republic of Venezuela
- **ICC ARBITRATION No. 12711/KGA:** SWEC v. PDVSA Petróleo S.A.
- **ICDR:** International Commercial Arbitration between a Canadian Mining Company and a Chilean Construction Company in South America.
- **ICSID ARB (AF)/04/1:** Corn Products International, Inc. v. United Mexican States.

Arbitrator Experience

- **ICSID:** Aguas del Tunari S.A. v Republic of Bolivia (ICSID Case No. AB/02/3).

- **ICC:** Independent Expert/Arbitrator Establishing a substitute pricing formula for a natural gas fuel supply agreement between an electricity generator in Mexico, a natural gas marketer in the US and a transporter in Texas.
- **ICC:** Independent Expert/Arbitrator Creating a pricing formula for an ethane supply agreement between an ethane producer and an ethylene producer.

Previous Positions

- **Cornerstone Research**, Co-head, International Arbitration and Litigation, 2014-2023.
- **Berkeley Research Group**, Director, 2010-2014.
- **LECG**, Director, 2002-2010.
- **CRAI**, Vice President, 1999-2002.
- **DISEÑO DE ESTRATEGIAS**, CEO, 1997-1999; Chairman, 2000-2010.
- **PEMEX Gas and Basic Petrochemicals**, Founding CEO, 1992-1994.

Teaching Experience

- **University of London**, Visiting Professor, 1990.
- **El Colegio de México**, Tenured Professor of Economics, 1982-1992.
- **University of Illinois at Urbana-Champaign**, Assistant Professor of Economics, 1978-1982.

Government Service - Mexico

- Secretary of Commerce and Industrial Promotion. Chief of Staff, Secretary's Office, 1995-1996.
- PEMEX, Chief Negotiator during the NAFTA negotiations 1990-1992.
- Secretary of Programming and the Budget, Economic Advisor to the Secretary and Economic Advisor to the Under-Secretary of Planning and Budget, 1983-1988.
- Secretary of the Treasury, Chief Economic Advisor to the Secretary, 1978.

United Nations Experience

- Economic Commission for Latin America and the Caribbean, Senior Economist and Regional Advisor in Economic Development, (1989-1990).
- World Bank, Consultant, 1987-1990.
- IMF, Consultant, 1989-1990.
- United Nations Development Program, Senior Economist and Project Administrator, 1986-1987.

Activities and Honors

- Mexican Academy of Science, Member, 1988-present.
- American Economic Association, Member, 1974-present.
- American Finance Association, Member, 2011-2020.
- Northern California International Arbitration Club, Founding Member, 2003-2010.
- National Research Fellow (Investigador Nacional - México), 1984-1990.
- Mexican Academy of Law and Economics, Member, 2005-2006.
- Mexican Council on Foreign Relations, Member, 2005-2007.
- Latin American Econometric Society, Founding Member, 1981-1983.
- Best Student of Mexico, 1971.

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Turner, Mason & Company

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XII. Appendix C: Long-Term Growth Rates

220. Delaware courts have accepted that the long-term growth rate falls within a range, between the rate of inflation at the lower end and the growth rate of nominal gross domestic product (“GDP”) at the top end. Inflation serves as a lower-bound because a consistently profitable company, that is not at risk of insolvency, will be able to increase its cash flows in line with inflation over the long term. Nominal GDP growth is considered an upper bound because a firm in a mature industry would not be able to grow more quickly than the overall economy for an extended period.²⁷⁰ Specifically, Delaware courts have accepted that the long-term growth rate falls within a range from 2.0% to 5.0%.²⁷¹

²⁷⁰ Shannon P. Pratt and Alina V. Niculita, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, Fifth Edition, 2008, McGraw Hill, Fifth Edition, pp. 247-248.

²⁷¹ Delaware Open MRI Radiology Associates v. Kessler, Case No. 275-N (Del. Ch.), Decision April 26, 2006; Global GT LP and Global GT Ltd v. Golden Telecom Inc., Case No. 3698-VCS (Del. Ch.), Decision April 23, 2010; Towerview LLC v. Cox Radio, Inc., Case No. 4809-VCP (Del. Ch.), Decision June 28, 2013; Merion Capital, L.P. v. 3M Cogent, Inc., Case No. 6247-VCP (Del. Ch.), Decision July 8, 2013; Leilani Zutrau v. John C. Jansing, Case No. 7457-VCP (Del. Ch.), Decision July 31, 2014; In re: Rural/Metro Corp., Case No. 6350-VCL (Del. Ch.), Decision October 10, 2014; Nathan Owen v. Lynn Cannon, Bryn Owen, Energy Services Group Inc. and ESG Acquisition Corp., Case No. 8860-CB (Del. Ch.), Decision June 17, 2015; Merion Capital LP and Merion Capital II LP v. BMC Software, Inc., Case No. 8900-VCG (Del. Ch.), Decision October 21, 2015; In re: Appraisal of Dell Inc., Case No. 9322-VCL (Del. Ch.), Decision May 31, 2016; In re: Appraisal of DFC Global Corp., Case No. 10107-CB (Del. Ch.), Decision July 8, 2016; John Douglas Dunmire v. Farmers & Merchants Bancorp of Western Pennsylvania, Inc., Case No. 10589-CB (Del. Ch.), Decision November 10, 2016; Merion Capital LP and Merion Capital II LP v. Lender Processing Services, Inc., Case No. 9320-VCL (Del. Ch.), Decision December 16, 2016; In re: Appraisal of SWS Group, Inc., Case No. 10554-VCG (Del. Ch.), Decision May 30, 2017; ACP Master, Ltd., et al. v. Sprint Corporation, et al. and ACP Master, Ltd., et al. v. Clearwire Corporation, Case No. 8508-VCL and 9042-VCL (Del. Ch.), Decision July 21, 2017; Domain Associates, L.L.C. v. Nimesh S. Shah, Case No. 12921-VCL (Del. Ch.), Decision August 13, 2015; In re: Appraisal of AOL Inc., Case No. 11204-VCG (Del. Ch.), Decision August 15, 2018; In re: Appraisal of Jarden Corporation, Case No. 12456-VCS (Del. Ch.), Decision September 16, 2019; William Richard Kruse v. Synapse Wireless, Inc., Case No. 12392-VCS (Del. Ch.), Decision July 14, 2020; Ramcell, Inc. v. Alltel Corporation, Case No. 2019-0601-PAF (Del. Ch.), Decision October 31, 2022; HBK Master Fund LP and MBK Merger Strategies Master Fund LP v. Pivotal Software, Inc., Case No. 2020-0165-KSJM (Del. Ch.), Decision August 14, 2023.

221. The US inflation rate was 2.58% from 2000–2024.²⁷² The real growth of oil and gas production in the United States since 1960 equals 1.0%.²⁷³ The 2024 IEA World Energy Outlook expects world oil demand to *decrease* by 0.44% from 2030-2050.²⁷⁴

222. For the entire US economy, central bankers forecast that real GDP growth rate will equal at least 1.7%.²⁷⁵

223. Thus, consistent with the range identified by Delaware courts, the perpetuity growth rate is 2.14% (accounting for the decrease in world oil demand, based on the IEA future forecast through 2050). The calculation of the nominal growth rate, equal to the sum of the price growth rate and the real growth rate, is presented in **Table 21** below.

Table 21. Perpetuity Growth Rate Calculation

		Period	Rate
Price Growth	[1]	2000-2024	2.58%
Real Growth	[2]	2030-2050	-0.44%
Nominal Growth	[3] = [1] + [2]		2.14%

Sources: [1]: U.S. Bureau of Labor Statistics, Inflation, consumer prices for the United States [FPCPITOTLZGUSA], retrieved from FRED, Federal Reserve Bank of St. Louis, June 5, 2025, available at <https://fred.stlouisfed.org/series/FPCPITOTLZGUSA>; [2] IEA, World Energy Outlook, October 2024, available at <https://www.iea.org/reports/world-energy-outlook-2024>, p. 315, Table A.9: Oil demand (mbpd), World Oil Demand from “State Policies Scenario.”

Notes: [1] Price growth is calculated as the average of the consumer price inflation rates for the years 2000-2024. [2] Real growth is calculated as the CAGR of world oil demand from 2030 to 2050. World oil demand for 2030 is 101.7 and for 2050 is 93.1. $CAGR = (93.1 \div 101.7)^{(1/20)} - 1$. [3] Nominal growth is calculated as the sum of price growth and real growth.

224. The historical performance of the five most comparable companies, in nominal terms, significantly exceeds the assumed nominal growth rate. I collect quarterly EBITDA for the five most comparable companies as far back as 2002 (when such data is available) and calculate the

²⁷² U.S. Bureau of Labor Statistics, Inflation, consumer prices for the United States [FPCPITOTLZGUSA], retrieved from FRED, Federal Reserve Bank of St. Louis, June 5, 2025, available at <https://fred.stlouisfed.org/series/FPCPITOTLZGUSA>.

²⁷³ U.S. Energy Information Administration, U.S. Field Production of Crude Oil, accessed September 17, 2024, available at <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPUS1&f=M>. These production values do not include the effects of inflation.

²⁷⁴ International Energy Agency, “2024 World Energy Outlook,” October 2024, available at <https://www.iea.org/reports/world-energy-outlook-2024>, p. 315.

²⁷⁵ Federal Reserve, “Monetary Policy Report – February 2025,” February 7, 2025, available at <https://www.federalreserve.gov/monetarypolicy/2025-02-mpr-part3.htm>.

long-term growth rate as the trend of the quarterly EBITDA to present. I calculate the long-term growth rate by calculating the last twelve months (“LTM”) EBITDA for each of the five most comparable companies for each quarter from 2002:Q1–2025:Q1. Some of the companies were not publicly traded as of 2002:Q1, so I use all available quarterly EBITDA for those companies through 2025:Q1. Second, I calculate the natural log of these LTM EBITDA values, with an adjustment for negative EBITDA values to ensure that the natural log is well-defined.²⁷⁶ Third, I compute the slope of the trendline of best fit for each company’s data points. The slope of the trendline, with the x-axis measures in quarters of a year, equals the yearly growth rate of the trend in the company’s time series of EBITDA. The yearly growth rates for the five most comparable companies range from 0.46% (PBF Energy) to 14.17% (HF Sinclair) for the period including data through the present (2025:Q1). See **Table 22** below. Because of the Covid-19 pandemic, I also calculate the yearly growth rates for the period that ends with 2019:Q4. With this restricted period, the yearly growth rates all exceed 4.70% (PBF Energy).

225. **Table 22** below reports the historical nominal growth rates of EBITDA for the five most comparable companies. The median yearly growth rate for the period including data through the present (2025:Q1) is 5.32% and the median yearly growth rate for the shortened period that ends pre-Covid (2019:Q4) is 6.81%. Under both evaluation periods, the historical financial performance of the five most comparable companies (in nominal terms) significantly exceeds the assumed perpetuity growth rate (in nominal terms).

²⁷⁶ For each quarter, I add the absolute value of the minimum EBITDA for that company over the period plus \$1. I do this for all quarters. This adjustment has insignificant effect on the results and ensures that the natural log is well-defined for every quarter.

Table 22. Historical Nominal Growth Rates of EBITDA for the Five Most Comparable Companies

Company	2002:Q1-2025:Q1	2002-2019
Marathon Petroleum	12.19%	17.31%
Phillips 66	1.26%	6.48%
Valero	5.32%	6.81%
HF Sinclair	14.17%	19.22%
PBF Energy	0.46%	4.70%
Median	5.32%	6.81%

Source: CapIQ.

Notes: Calculations for Valero and HF Sinclair use data going back to 2002:Q1. The other three companies do not report financial data until later; with Marathon starting 2009:Q3, Phillips 66 starting 2010:Q4, and PBF starting 2010:Q1.

XIII. Appendix D: Additional Tables

Table 23. Financials for CPC and PDV Holding, Inc., 2020–2024

(\$ in millions USD)	CITGO Petroleum Corporation					PDV Holding, Inc.				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Net Sales	\$14,673	\$27,367	\$45,353	\$37,485	\$34,926	\$14,731	\$27,421	\$45,399	\$37,523	\$34,926
Equity in earnings of affiliates and other revenue	17	18	(5)	16	44	31	32	34	30	44
Total Revenues	14,690	27,385	45,348	37,501	34,970	14,761	27,453	45,433	37,553	34,970
Cost of sales and operating expenses	14,946	26,564	40,655	33,917		14,976	26,588	40,681	33,942	
Cost of sales					31,023					31,023
Operating expenses					2,489					2,489
SG&A	287	250	321	411	402	307	271	341	434	425
Depreciation and amortization	614	593	590	649	707	617	596	593	652	707
Interest expense, net	207	240	223	13	47	396	421	404	105	43
Other (income) expense	(215)	(52)	(29)	(120)	(99)	(590)	(50)	(10)	(120)	(96)
Total Costs	15,839	27,595	41,760	34,870	34,569	15,706	27,826	42,009	35,012	34,591
Income before income taxes	(1,149)	(210)	3,588	2,631	401	(945)	(373)	3,424	2,541	378
Income tax expense	(482)	(50)	774	593	96	(463)	(88)	735	552	90
Net income	(667)	(160)	2,814	2,038	305	(482)	(285)	2,688	1,989	288
Interest expense, net	207	240	223	13	47	396	421	404	105	43
Income tax expense	(482)	(50)	774	593	96	(463)	(88)	735	552	90
Depreciation and amortization	614	593	590	649	707	617	596	593	652	707
EBITDA	(328)	623	4,401	3,293	1,155	69	645	4,421	3,298	1,129

Sources: [2020-2021] CITGO Petroleum Corporation Annual Report 2021 for the fiscal year ended December 31, 2021, March 23, 2022, p. 49; [2022-2023] CITGO Petroleum Corporation Annual Report 2023 for the fiscal year ended December 31, 2023, March 6, 2024, p. 51; [2024] CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, p. 55; [2020-2021] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2021 and 2020, June 29, 2023, p. 2; [2021-2022] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2022 and 2021, June 29, 2023, p. 2; [2022-2023] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2023 and 2022, April 18, 2024, p. 2; [2024] PDV Holding, Inc. Annual Report for the Fiscal Year Ended December 31, 2024, March 6, 2025, p. F-4.

Table 24. PDVH & Other Subsidiaries Expenses (General Corporate and Legal)

<i>(\$ in millions USD)</i>	2024A	2025B
<u>PDVH Standalone</u>		
Legal Expenses	16.82	16.68
Sales Process	2.64	3.00
Other Expenses	6.54	4.72
Total PDVH Standalone Expenses	26.00	24.40
<u>PDVH Subsidiaries (not incl. CITGO Holding)</u>		
<u>PDV USA, Inc.</u>		
Legal Expenses	2.05	1.90
Total PDV USA, Inc. Expenses	2.05	1.90
<u>CITGO Aruba Holding, LLC</u>		
Settlement (Azurra)	3.80	
Settlement (Doushar)		1.00
Legal Expenses (incl. Settlements)	3.93	1.09
Administrative Expenses	0.06	0.13
Total CITGO Aruba Holding, LLC	3.99	1.22
Total PDVH Subsidiaries (not incl. CITGO Holding)	6.04	3.12
Total PDVH and Subsidiaries	32.04	27.52

Sources: CITGO, Answers to Budget Questions, May 28, 2025, (“2025.5.28 PDVH Budget Questions REVISED.pdf”); CITGO, Organization Chart, December 5, 2023 (“2023 12 05 CITGO Org Chart Def_REVISED.pdf”).

Notes: Values for 2025 are budgeted as of April 2025.

Table 25. 2026-2030 Tax Calculation for Composite Forecast

(\$ in millions USD)		2026	2027	2028	2029	2030
Total EBITDA (CITGO Forecast)	[1]	\$				
Depreciation & Amortization	[2]					
Interest	[3]					
Pre-Tax Income (EBT)	[4] = [1] + [2] + [3]					
Taxes	[5]					
Tax Rate (CITGO Forecast)	[6] = [5] / [4]					
Total EBITDA (Composite Forecast)	[7]	\$	1,689	\$ 2,089	\$ 2,581	\$ 2,839
Depreciation & Amortization	[8]					
Interest	[9]					
Pre-Tax Income (EBT)	[10] = [7] + [8] + [9]					
Tax Rate	[11]		25.6%	25.8%	25.9%	26.5%
Taxes (Composite Forecast)	[12] = [11] * [10]		209	305	428	509
						484

Sources: [1]: Evercore, Revised CITGO Financial Projections, January 26, 2025 (“Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx”); [2], [3], [5], [8], [9]: CITGO, Medium Term Plan 2025-2030, January 20, 2025 (“2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf”), p. 71.

Table 26. PDVH EBITDA and Free Cash Flow, Actual and Projected (CITGO Forecast), 2020–2030 (Supporting Data)

(\$ in millions USD)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
EBITDA Actual	(35)	579	4,448	3,251	1,076						
EBITDA Projected					1,076						
Free Cash Flow Actual	(549)	195	3,839	2,547	131						
Free Cash Flow Projected					131						

Sources: [2020] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2021 and 2020, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2020, March 25, 2021, p. 5; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 13; CITGO Petroleum Corporation Annual Report 2020 for the fiscal year ended December 31, 2020, March 24, 2021, p. 56; [2021] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2021 and 2020, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2021, March 24, 2022, p. 3; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 13; CITGO Petroleum Corporation Annual Report 2020 for the fiscal year ended December 31, 2020, March 24, 2021, p. 57-58; [2022] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2022 and 2021, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2022, March 9, 2023, p. 5; CITGO Petroleum Corporation Annual Report 2022 for the fiscal year ended December 31, 2022, March 8, 2023, p. 55-56; [2023] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2023 and 2022, April 18, 2024, p. 2; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, pp. 5, 13; CITGO Petroleum Corporation Annual Report 2023 for the fiscal year ended December 31, 2023, March 6, 2024, p. 59-60; [2024] CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 5; CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, pp. 62-63; PDV Holding, Inc. Annual Report for the Fiscal Year Ended December 31, 2024, March 6, 2025, p. F-4; [2025-2030] Evercore, Revised CITGO Financial Projections, January 26, 2025 (“Revised CITGO Financial Projections (Financial Model) REVISED FINAL_Highly Confidential-Clean Team.xlsx”); CITGO, Medium Term Plan 2025-2030, January 20, 2025 (“2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf”), p. 71.

Table 27. PDVH EBITDA and Free Cash Flow, Actual and Projected (Composite Forecast), 2020–2030 (Supporting Data)

(\$ in millions USD)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
EBITDA Actual	(35)	579	4,448	3,251	1,076						
EBITDA Projected (CITGO)					1,076						
EBITDA Projected (Composite)					1,076	1,435	1,884	2,307	2,821	3,101	2,956
Free Cash Flow Actual	(549)	195	3,839	2,547	131						
Free Cash Flow Projected (CITGO)					131						
Free Cash Flow Projected (Composite)					131	321	640	870	1,448	1,864	1,586

Sources: [2020] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2021 and 2020, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2020, March 25, 2021, p. 5; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 13; CITGO Petroleum Corporation Annual Report 2020 for the fiscal year ended December 31, 2020, March 24, 2021, p. 56; [2021] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2021 and 2020, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2021, March 24, 2022, p. 3; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, p. 13; CITGO Petroleum Corporation Annual Report 2020 for the fiscal year ended December 31, 2020, March 24, 2021, p. 57-58; [2022] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2022 and 2021, June 29, 2023, p. 2; CITGO Holding, Inc. Earnings Conference Call for 4th Quarter 2022, March 9, 2023, p. 5; CITGO Petroleum Corporation Annual Report 2022 for the fiscal year ended December 31, 2022, March 8, 2023, p. 55-56; [2023] PDV Holding, Inc. Consolidated Financial Statements for Financial Years Ended December 31, 2023 and 2022, April 18, 2024, p. 2; CITGO Petroleum Earnings Conference Call for 4th Quarter 2023, March 7, 2024, pp. 5, 13; CITGO Petroleum Corporation Annual Report 2023 for the fiscal year ended December 31, 2023, March 6, 2024, p. 59-60; [2024] CITGO Petroleum Earnings Conference Call for 4th Quarter 2024, March 6, 2025, p. 5; CITGO Petroleum Corporation Annual Report 2024 for the fiscal year ended December 31, 2024, March 5, 2025, pp. 62-63; PDV Holding, Inc. Annual Report for the Fiscal Year Ended December 31, 2024, March 6, 2025, p. F-4; [2025-2030] Evercore, Revised CITGO Financial Projections, January 26, 2025 (“Revised CITGO Financial Projections (Financial Model) REVISED FINAL Highly Confidential-Clean Team.xlsx”); CITGO, Medium Term Plan 2025-2030, January 20, 2025 (“2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf”), p. 71; CITGO, Answers to Budget Questions, May 28, 2025 (“2025.5.28 PDVH Budget Questions REVISED.pdf”); S&P Global Platts, Crude and Refined Products Package, North America Crude Oil Markets Price Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America Refining and Marketing Price and Margin Long-Term Outlook for 2025:Q1, March 11, 2025; S&P Global Platts, Crude and Refined Products Package, North America NGL Price Long-Term Outlook for 2025:Q1, March 21, 2025; S&P Global Platts, Crude and Refined Products Package, Base Oil Price Outlook for 2025:Q1, April 9, 2025; RBN Energy, Future of Fuels: RFA Outlook for Crude Oil, Refined Products, Biofuels and EVs, Volume 5, Appendix 8 – Price Forecasts, January 31, 2025; Turner, Mason & Company, 2025 Crude and Refined Products Outlook, Appendix 3 – Price Outlook, March 2025; Wood Mackenzie, North America Crude Outlook, March 2025; Wood Mackenzie, USGC Refined Products Outlook, May 2025; Wood Mackenzie, USMC Refined Products Outlook, May 2025.

Table 28. 2025 Tax Calculation for DCF Valuation

		2025 ^[A]	2025:Q1A ^[B]	2025:L9ME ^[C]
EBITDA	[1]			
Interest + Depreciation & Amortization	[2]			
Pre-Tax Income (EBT)	[3] = [1] - [2]			
Tax Rate	[4]			
Taxes	[5] = [3] * [4]			

Sources: [A] and [B]: CITGO, Q1 Presentation, April 30, 2025, (“2025.5.1 BOD Meeting - 1Q 2025 BOD Presentation Final.pdf_Highly Confidential - Clean Team Restricted.pdf”), April 30, 2025, p. 61; [C] = [A] - [B]; [1] and [2]: CITGO, Q1 , Q1 Presentation, April 30, 2025, (“2025.5.1 BOD Meeting - 1Q 2025 BOD Presentation Final.pdf_Highly Confidential - Clean Team Restricted”), pp. 61, 94; [4]: CITGO, Medium Term Plan 2025-2030, January 20, 2025 (“2025.1.20 MTP 2025-30 to BOD Updated 20 Jan 2025.pdf_Highly Confidential - Clean Team.pdf”), pp. 71.

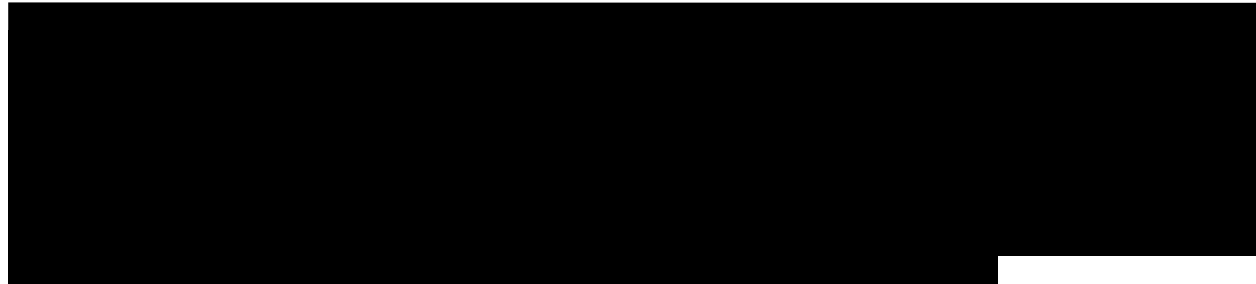


Exhibit 3

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